

Vaccines and Global Health: The Week in Review 26 July 2014 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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PAHO/WHO: <u>Haiti to launch cholera vaccination with PAHO/WHO support</u> Port-au-Prince, Haiti, 23 July 2014 (PAHO/WHO) Excerpt

Haiti is set to vaccinate 200,000 people in three departments against cholera starting in August, with support from the Pan American Health Organization/World Health Organization (PAHO/WHO).

The campaign will be carried out in the Artibonite (Gonaives and Ennery), Central (Lascahobas, Saut d'Eau, Savanette and Mirebalais), and West (Arcahaie) departments, which were chosen by the Ministry of Public Health and Population (MSPP) because they are considered high-risk zones...

PAHO/WHO's representative in Haiti, Jean-Luc Poncelet, noted that vaccination is one of a series of measures implemented by Haitian health authorities with support from PAHO/WHO and other international partners. Other key measures include timely treatment for people sickened by the disease, improved access to potable water and adequate sanitation, the promotion of community participation and strengthened epidemiological surveillance...

Last week, PAHO/WHO shipped 400,000 doses of oral cholera vaccine (OCV) to Haiti. UN Secretary-General Ban Ki-moon formally presented the vaccines to Minister of Health Florence Guillaume. They are being kept at Haiti's PROMESS warehouse, which has been managed by PAHO/WHO since 1992.

Financed by the UN's Central Emergency Response Fund (CERF), the vaccines are from a global stockpile created by the World Health Assembly in 2011 to provide an additional tool for controlling cholera epidemics around the world. Besides Haiti, the global stockpile—for which WHO serves as secretariat—has also provided vaccines to the Democratic Republic of Congo, South Sudan, Guinea and Ethiopia. The stockpile is also supported by the International Federation of Red Cross and Red Crescent Societies, Doctors without Borders and UNICEF. PAHO/WHO is also assisting efforts to fight cholera in Haiti and the Dominican Republic along with other members of the Regional Coalition for Water and Sanitation to Eliminate Cholera in Hispaniola. The Coalition, for which PAHO/WHO serves as secretariat, provides technical expertise on cholera control and elimination and is seeking to mobilize resources to support the two countries' national plans to eliminate cholera by 2022...

- :: Oral cholera vaccine stockpile (WHO)
- :: Regional Coalition for Water and Sanitation to Eliminate Cholera in Hispaniola

WHO: Humanitarian Health Action [to 26 July 2014]

:: The cholera outbreak and health situation in South Sudan

25 July 2014 — "General security situation remained calm in most parts of the country, with isolated incidents and clashes in Upper Nile, Jonglei and Unity states. No new significant displacements have been reported. Efforts to contain the cholera outbreak continue. Health facilities had recorded 5,141 (CFR 2.2%) cases by 21 July 2014. Acute Watery Diarrhoea (AWD) is the leading cause of morbidity among Internally Displaced People (IDP)...

:: Read the latest health situation report pdf, 894kb

:: Read the latest Health Cluster bulletin pdf, 883kb

POLIO [to 26 July 2014]

Report: Polio - Outbreak in the Middle East :: War in Syria Opens the Door to an Old Enemy

WHO, UNICEF

July 2014 12 pages

Excerpt from WHO announcement

Amman/ Cairo, 22 July 2014 – In a report released today, WHO and UNICEF announced completion of the first phase of the biggest polio vaccination campaign ever undertaken in the history of the Middle East; 25 million children under the age of five have been reached in seven countries in 37 rounds.

"Despite immense challenges and the desperate conditions around the region, children were vaccinated from three to six times. This gives a glimpse of hope and is largely thanks to thousands of unsung heroes: committed health workers and volunteers who undertook such a formidable task all over the region and inside Syria braving dangers to provide the polio vaccination to children," said Maria Calivis, UNICEF's Regional Director for the Middle East and North Africa.

The report attributes the return of polio to Syria after 14 years to the following factors: disruption of routine immunization; severe damage to Syria's health infrastructure; continuous population displacement within Syria and across its borders; and missed children...

"Polio has forced its way back to Syria, adding to what was already a humanitarian disaster. We got to a point where we had to work with very limited resources to defeat what had been a long forgotten enemy in this region: one that does not know borders or checkpoints and can travel fast, infecting children not just in war torn Syria but across the region" said Chris Maher, WHO Manager for Polio Eradication and Emergency Support...

The report says that a number of critical actions must be undertaken to end the polio spread in the region:

- :: Grant immediate and unhindered access to hard-to-reach children under the age of five inside Svria.
- :: Guarantee the safe passage of health workers and protect medical vehicles and other cold chain equipment inside Syria.
- :: Raise awareness on polio and the need to vaccinate all children under the age of five around the region multiple times.
- :: Secure funding to undertake repeated vaccination rounds by the end of 2014...

GPEI Update: Polio this week - As of 23 July 2014

Global Polio Eradication Initiative

Editor's Excerpt and text bolding

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

- :: Polio vaccination campaigns reaching more than 25 million children multiple times in the Middle East since October have helped slow the outbreak: new report from UNICEF and WHO emphasises that the second phase of outbreak response focuses on reaching those children who continue to be missed.
- :: In the Horn of Africa, further efforts are on to intensify the outbreak response, following confirmation of new cases from Somalia last week. These cases underscore the risk that ongoing low-level poliovirus transmission continues to pose to children across the region, and of the urgent need to fully stop the outbreak rapidly completely.

Afghanistan

:: Khost province borders Pakistan, where communities displaced by military action have been leaving North Waziristan, Pakistan. Health authorities in surrounding districts of Pakistan and across the border in Afghanistan have been vaccinating displaced children: more than 35,000 displaced children under the age of 10 are reported to have received a dose of bivalent oral polio vaccine (bivalent OPV) as they entered the Afghan provinces of Paktyka and Khost.

Nigeria

:: One new circulating vaccine-derived poliovirus type 2 (cVDPV2) case was reported in the past week, with onset of paralysis on 13 June from Borno. The total number of cVDPV2 cases for 2014 is now 14. It is the most recent cVDPV2 case in the country.

Pakistan

- :: Five new WPV1 cases were reported in the past week, three from Federally Administered Tribal Areas (FATA two from North Waziristan and one from South Waziristan), one from Khyber Pakhtunkhwa (KP) and one from Gadap, greater Karachi, Sindh. This brings the total number of WPV1 cases in the country to 99 for 2014. The case from South Waziristan is the most recent in the country, with onset of paralysis on 28 June.
- :: In order to protect those displaced by the military action in North Waziristan, people of all ages continue to be vaccinated against polio at transit points within the country (over 394,000 vaccinated to date) and during several rounds of house-to-house immunization campaigns in

the host communities (over 500,000 vaccinated in the first two rounds, with a third round just concluded)

Central Africa

:: The entire population of Equatorial Guinea, regardless of age, will be vaccinated in a campaign starting on 26 July. A house-to-house search for acute flaccid paralysis (AFP) cases will be conducted during the campaign; a similar search is currently taking place in Gabon. Cameroon, the Central African Republic (CAR), the Democratic Republic of the Congo (DR Congo), Gabon and the Republic of Congo also have mass vaccination campaigns planned for July.

PATH: New tools for polio surveillance could aid eradication efforts

July 22, 2014

Excerpt

With grant funding made possible by the Paul G. Allen Family Foundation, two new tools to help detect the poliovirus may soon strengthen global efforts to eradicate the disease. The foundation will invest up to US\$5.3 million dollars in support of this goal.

The tools, a system to improve environmental surveillance and a simplified diagnostic test, were developed by PATH, a leading international health organization, and researchers at the University of Washington (UW). They have the potential to help workers identify and stop polio by making it easier to find the virus in sewage and among people. Although polio spreads very quickly and can be devastating, many people will never show symptoms—making early detection and response crucial for controlling the spread of disease.

The grant announcement, made today by PATH and UW, comes at a time of heightened attention to the spread of polio worldwide. In early May, the World Health Organization (WHO) declared it a Public Health Emergency of International Concern, warning that the recent spread of the virus from Pakistan, Syria, and Cameroon to neighboring countries could spark widespread epidemics if leaders do not take action.

The initial \$2.4 million of the grant, administered in partnership with the Bill & Melinda Gates Foundation, will allow the PATH/UW team to accelerate development, evaluation, and introduction of the tools in coordination with global polio eradication partners. Additional technical and administrative support will be provided by the Gates Foundation as part of its longstanding support for eradication. PATH and UW will seek additional technical advice from the US Centers for Disease Control and Prevention (CDC) and WHO....

WHO: Global Alert and Response (GAR) – Disease Outbreak News [to 26 July 2014] http://www.who.int/csr/don/en/

- :: Ebola virus disease, West Africa update 24 July 2014
- :: Middle East respiratory syndrome coronavirus (MERS-CoV) update 23 July 2014

The **Weekly Epidemiological Record (WER) 25 July 2014**, vol. 89, 30 (pp. 337–344) includes:

- :: Revised guidance on the choice of pertussis vaccines: July 2014
- :: WHO Global rotavirus surveillance network a strategic review of the first 5 years (2008–2012)

http://www.who.int/entity/wer/2013/wer8930.pdf?ua=1

WHO Watch [to 26 July 2014]

:: WHO Director-General addresses conference on cervical cancer in Africa

Dr Margaret Chan, Director-General of the World Health Organization

Goodwill message to participants of the 8th Stop cervical, breast and prostate cancer in Africa conference: Moving forward to end cervical cancer by 2030: Universal access to cervical cancer prevention

Windhoek, Namibia, 20 July 2014

:: World Hepatitis Day 2014: Think again

25 July 2014 -- On World Hepatitis Day, 28 July, WHO welcomes new progress in tackling one of the world's most serious diseases. Viral hepatitis – a group of infectious diseases known as hepatitis A, B, C, D, and E – affects millions of people worldwide, causing acute and chronic liver disease and killing close to 1.4 million people every year. WHO and partners urge policy-makers, health workers and the public to "think again" about this silent killer.

Find out more about World Hepatitis Day 2014

GAVI Watch [to 26 July 2014]

http://www.gavialliance.org/library/news/press-releases/24 July 2014

<u>German Government to host crucial GAVI Alliance pledging event under the</u> patronage of Chancellor Angela Merkel

Excerpt

Berlin, 24 July 2014 - The German Government today announced that it will convene the GAVI Alliance replenishment pledging meeting under the patronage of Federal Chancellor Angela Merkel in Berlin on 27th January 2015.

The event will mark the final stage of the Alliance's replenishment process, in which donors have been asked to commit an additional US\$ 7.5 billion to support immunisation programmes in developing countries between 2016 and 2020...

CDC/MMWR Watch [to 26 July 2014]

http://www.cdc.gov/mmwr/mmwr wk.html

Safe and effective vaccine that prevents cancer continues to be underutilized

Latest vaccination coverage estimates for adolescents show only small increase for HPV vaccine July 24, 2014

Excerpt

CDC officials announced today that the number of girls and boys aged 13-17 years receiving human papillomavirus (HPV) vaccine remains unacceptably low despite a slight increase in vaccination coverage since 2012, according to data from CDC's 2013 National Immunization Survey-Teen (NIS-Teen) published in this week's Morbidity and Mortality Weekly Report (MMWR).

HPV vaccine prevents various forms of cancer, but HPV vaccine remains underutilized. There is a substantial gap between the number of adolescents receiving tetanus, diphtheria, and pertussis (Tdap) vaccine and the number receiving HPV vaccine. It is estimated that only 57 percent of adolescent girls and 35 percent of adolescent boys received one or more doses of

HPV vaccine. However, nearly 86 percent of adolescents had received one dose of Tdap vaccine...

MMWR Weekly - July 25, 2014 / Vol. 63 / No. 29

- :: World Hepatitis Day July 28, 2014
- :: <u>Progress Toward Prevention of Transfusion-Transmitted Hepatitis B and Hepatitis C Infection</u>
 Sub-Saharan Africa, 2000–2011
- :: <u>Human Papillomavirus Vaccination Coverage Among Adolescents, 2007–2013, and Postlicensure Vaccine Safety Monitoring, 2006–2014 United States</u>
- :: <u>National, Regional, State, and Selected Local Area Vaccination Coverage Among Adolescents Aged 13–17 Years United States, 2013</u>
- :: WHO Global Rotavirus Surveillance Network: A Strategic Review of the First 5 Years, 2008–2012

Global Fund Watch [to 26 July 2014]

http://www.theglobalfund.org/en/mediacenter/announcements/ No new relevant content identified.

European Medicines Agency Watch [to 26 July 2014]

http://www.ema.europa.eu/ema/
No new relevant content identified.

Industry Watch [to 26 July 2014]

Selected media releases and other selected content from industry. **GSK announces EU regulatory submission for malaria vaccine candidate RTS,S**24 July 2014, London UK *Excerpt*

GSK announced today that it has submitted a regulatory application to the European Medicines Agency (EMA) for its malaria vaccine candidate, RTS,S.

The submission will follow the Article 58 procedure, which allows the EMA to assess the quality, safety and efficacy of a candidate vaccine, or medicine, manufactured in a European Union (EU) member state, for a disease recognised by the World Health Organization (WHO) as of major public health interest, but intended exclusively for use outside the EU. This assessment is done by the EMA in collaboration with the WHO, and requires products to meet the same standards as vaccines or medicines intended for use in the EU. Eligibility for the application was granted by the CHMP after agreement from WHO that RTS,S met criteria for such an evaluation.

RTS,S is intended exclusively for use against the Plasmodium falciparum malaria parasite, which is most prevalent in sub-Saharan Africa (SSA). Around 90 per cent of estimated deaths from malaria occur in SSA, and 77 per cent of these are in children under the age of 5.

The EMA submission is the first step in the regulatory process toward making the RTS,S vaccine candidate available as an addition to existing tools currently recommended for malaria prevention. An effective vaccine for use alongside other measures such as bednets and antimalarial medicines would represent a advance in malaria control. To-date there is no licensed vaccine available for the prevention of malaria.

If a positive opinion from the EMA is granted, the WHO has indicated a policy recommendation may be possible by end of 2015. A policy recommendation is a formal review

process by WHO designed to assist in the development of optimal immunisation schedules for diseases that have a global public health impact, such as malaria...

- ...Dr Sophie Biernaux, Head of the Malaria Vaccine Franchise, GSK said: "This is a key moment in GSK's 30-year journey to develop RTS,S and brings us a step closer to making available the world's first vaccine that can help protect children in Africa from malaria.".... About RTS,S
- :: RTS,S is the scientific name given to this malaria vaccine candidate and reflects the composition of this vaccine candidate that also contains the AS01 adjuvant system[ii].
- :: RTS,S aims to trigger the body's immune system to defend against the P falciparum malaria parasite when it first enters the human host's bloodstream and/or when the parasite infects liver cells.
- :: GSK has taken the lead in the overall development of RTS,S and has invested more than \$350 million to date and expects to invest a further \$260 million until development is completed. With more than US\$200 million in grant monies from the Bill & Melinda Gates Foundation, the PATH Malaria Vaccine Initiative (MVI) contributes financial, scientific, managerial, and field expertise to the development of RTS,S.
- :: GSK has committed that the eventual price of RTS,S will cover the cost of manufacturing the vaccine together with a small return of around 5 per cent that will be reinvested in research and development for second-generation malaria vaccines, or vaccines against other neglected tropical diseases.

<u>Reports/Research/Analysis/Commentary/Conferences/Meetings/Book</u> Watch/Tenders

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

Report: The Gap — Notes on the IS Global Think Tank on Inequity and Global Health
Barcelona Institute of Global Health
8 July 2014 24 pages
Excerpts

...This paper is ISGlobal's first attempt to define a position and a work agenda for inequity and global health. In it we outline our reflections on the subject, the questions we are asking ourselves, and the direction of our programme of work in this area. The paper is in part based on the content of the seminar Building a Global Health Social Contract for the 21st Century held in Barcelona in November 2013...

...In the coming months, the world will witness an intense debate about inequity and the best strategy for combating poverty after 2015. The right of millions of people to basic health care is one of the keystones of this debate....

<u>Journal Watch</u>

Vaccines and Global Health: The Week in Review continues its weekly scanning of key peerreviewed 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**

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 14, Issue 8, 2014

http://www.tandfonline.com/toc/uajb20/current

[New issue: No relevant content]

American Journal of Infection Control

Vol 42 | No. 7 | July 2014 | Pages 697-818 http://www.ajicjournal.org/current [Reviewed earlier]

American Journal of Preventive Medicine

Volume 47, Issue 2, p105-232, e3-e6 August 2014 http://www.ajpmonline.org/current [Reviewed earlier]

American Journal of Public Health

Volume 104, Issue 8 (August 2014) http://ajph.aphapublications.org/toc/ajph/current [Reviewed earlier]

American Journal of Tropical Medicine and Hygiene

July 2014; 91 (1) http://www.ajtmh.org/content/current [Reviewed earlier]

Annals of Internal Medicine

15 July 2014, Vol. 161. No. 2 http://annals.org/issue.aspx [Reviewed earlier]

BMC Health Services Research

(Accessed 26 July 2014)
http://www.biomedcentral.com/bmchealthservres/content
[No new relevant content]

BMC Infectious Diseases

(Accessed 26 July 2014)

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

Research article

<u>Human papillomavirus infection in Bhutan at the moment of implementation of a national HPV vaccination programme</u>

Ugyen Tshomo, Silvia Franceschi, Dorji Dorji, Iacopo Baussano, Vanessa Tenet, Peter JF Snijders, Chris JLM Meijer, Maaike CG Bleeker, Tarik Gheit, Massimo Tommasino and Gary M Clifford

Author Affiliations

BMC Infectious Diseases 2014, 14:408 doi:10.1186/1471-2334-14-408

Published: 22 July 2014 Abstract (provisional)

Background

Cervical cancer is the most common female cancer in Bhutan, the first low/middle-income country to implement a national human papillomavirus (HPV) vaccination programme. Methods

To provide a robust baseline for future evaluations of vaccine effectiveness, cervical cell specimens were obtained from 2,505 women aged 18-69 years from the general population, and biopsies from 211 cervical intraepithelial neoplasia grade 3 (CIN3) and 112 invasive cervical cancer (ICC) cases. Samples were tested for HPV using GP5+/6+ PCR. Results

Among the general population, HPV prevalence was 26%, being highest (33%) in women <=24 years, but remaining above 15% in all age-groups. Determinants of HPV included age, marital status, and number of sexual partners. Among the eight percent with cytological abnormalities, 24 CIN3 and 4 ICC were histologically confirmed. Even after additional testing with a sensitive E7 PCR, no infections with vaccine-targeted HPV types were detected in the few vaccinated women (n = 34) compared to 6% prevalence in unvaccinated women of similar age (p = 0 . 215).

Conclusion

Based upon type-specific prevalence among biopsies, at least 70% of ICC in Bhutan are theoretically preventable by HPV16/18 vaccination, but screening programmes should be expanded among older women, who have an important underlying burden of CIN3 and ICC.

BMC Medical Ethics

(Accessed 26 July 2014)
http://www.biomedcentral.com/bmcmedethics/content
[No new relevant content]

BMC Public Health

(Accessed 26 July 2014)

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

Debate

The niche reduction approach: an opportunity for optimal control of infectious diseases in low-income countries?

Benjamin Roche, Hélène Broutin, Marc Choisy, Sylvain Godreuil, Guillaume Constantin de Magny, Yann Chevaleyre, Jean-Daniel Zucker, Romulus Breban, Bernard Cazelles and Frédéric Simard

Author Affiliations

BMC Public Health 2014, 14:753 doi:10.1186/1471-2458-14-753

Published: 25 July 2014 Abstract (provisional)

Background

During the last century, WHO led public health interventions that resulted in spectacular achievements such as the worldwide eradication of smallpox and the elimination of malaria from the Western world. However, besides major successes achieved worldwide in infectious diseases control, most elimination/control programs remain frustrating in many tropical countries where specific biological and socio-economical features prevented implementation of disease control over broad spatial and temporal scales. Emblematic examples include malaria, yellow fever, measles and HIV. There is consequently an urgent need to develop affordable and sustainable disease control strategies that can target the core of infectious diseases transmission in highly endemic areas.

Discussion

Meanwhile, although most pathogens appear so difficult to eradicate, it is surprising to realize that human activities are major drivers of the current high rate of extinction among upper organisms through alteration of their ecology and evolution, i.e., their "niche". During the last decades, the accumulation of ecological and evolutionary studies focused on infectious diseases has shown that the niche of a pathogen holds more dimensions than just the immune system targeted by vaccination and treatment. Indeed, it is situated at various intra- and inter- host levels involved on very different spatial and temporal scales. After developing a precise definition of the niche of a pathogen, we detail how major advances in the field of ecology and evolutionary biology of infectious diseases can enlighten the planning and implementation of infectious diseases control in tropical countries with challenging economic constraints. Summary

We develop how the approach could translate into applied cases, explore its expected benefits and constraints, and we conclude on the necessity of such approach for pathogen control in low-income countries.

Research article

Influenza immunization in Canada's low-income population

Jennifer Leigh Hobbs and Jane A Buxton

Author Affiliations

BMC Public Health 2014, 14:740 doi:10.1186/1471-2458-14-740

Published: 21 July 2014 Abstract (provisional)

Background

Immunization offers the best protection from influenza infection. Little evidence describes disparities in immunization uptake among low-income individuals. Higher rates of chronic disease put this population at increased risk of influenza-related complications. This analysis examines if the type of main source of household income in low-income groups affects influenza immunization uptake. We hypothesized that individuals on social assistance have less access to immunization compared to those with employment earnings or seniors' benefits.

Methods

Data was obtained from the Canadian Community Health Survey annual component 2009-2010. A total of 10,373 low-income respondents (<20,000\$ Canadian per annum) were included. Logistic regression, stratified according to type of provincial publicly funded immunization program, was used to examine the association between influenza immunization (in the last 12 months) and main source of household income (employment earnings; social assistance as a combination of employment insurance or worker's compensation or welfare; or seniors' benefits).

Results

Overall, 32.5% of respondents reported receiving influenza immunization. In multivariable analysis of universal publicly funded influenza immunization programs, those reporting social assistance (AOR 1.24, 95% CI 1.02-1.51) or seniors' benefits (AOR 1.56, 95% CI 1.23-1.98) were more likely to be immunized compared to those reporting employment earnings. Similar results were observed for high-risk programs.

Conclusions

Among the low-income sample, overall influenza immunization coverage is low. Those receiving social assistance or seniors' benefits may have been targeted due to higher rates of chronic disease. Programs reaching the workforce may be important to attain broader coverage. However, CCHS data was collected during the H1N1 pandemic influenza, thus results may not be generalizable to influenza immunization in non-pandemic years.

BMC Research Notes

(Accessed 26 July 2014)
http://www.biomedcentral.com/bmcresnotes/content
[No new relevant content]

British Medical Journal

26 July 2014(vol 349, issue 7968)
http://www.bmj.com/content/349/7968
[New issue; No relevant content]

Bulletin of the World Health Organization

Volume 92, Number 7, July 2014, 465-544 http://www.who.int/bulletin/volumes/92/7/en/ [Reviewed earlier]

Clinical Infectious Diseases (CID)

Volume 59 Issue 3 August 1, 2014

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

<u>Editorial Commentary: School-Located Influenza Vaccination: Why Worth the Effort?</u>

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Influenza viruses cause annual wintertime toll of morbidity and mortality in both hemispheres. The burden of influenza is not evenly borne by everyone; the highest rates of infection are in schoolchildren, and the highest rates of hospitalization and death are in the elderly aged ≥65 years [1]. Influenza vaccines are safe but are only moderately effective in preventing medically attended real-time polymerase chain reaction (RT-PCR)-confirmed influenza. Vaccine effectiveness can be diminished by virus mismatch, increased exposure in crowded environments and immunosenescence with advancing age. Despite maintaining the highest immunization uptake of approximately 65%, effectiveness can be marginal in the elderly, with highest morbidity and mortality seen during seasons when A(H3N2) viruses are predominant. Daycares and schools provide the ideal environment for spreading influenza, and increased school absences are early indicators of community outbreaks; hospitalizations and deaths increase after the peak activity. After gradually expanding the recommendations to immunize children ages 6–23 months with high hospitalization rates, then children 2–5 years with high outpatient-visit rates, the Centers for Disease Control and Prevention Advisory Committee for Immunization Practices (CDC ACIP) recommended children 5-17 years receive annual influenza immunization beginning 2008–2009 [1]. These were further expanded to include people ages 18–49 years after the 2009 A (H1N1) pandemic so that universal annual influenza vaccines for persons ages ≥6 months is now recommended.

School-located influenza vaccination (SLIV) offers the best option for achieving high-immunization coverage in a short period of time. With SLIV, immunization of approximately 50% (25%–75%) schoolchildren is possible, the highest proportions being elementary schoolchildren. With clinic-based vaccination, uptake of trivalent inactivated influenza vaccine (IIV-3) has generally been higher than ...

<u>School-Located Influenza Vaccination Decreases Laboratory-Confirmed Influenza and Improves School Attendance</u>

<u>Pia S. Pannaraj1,2</u>, <u>Hai-Lin Wang1</u>, <u>Hector Rivas3</u>, <u>Hilda Wiryawan1</u>, <u>Michael Smit1</u>, <u>Nicole Green3</u>, <u>Grace M. Aldrovandi1,2</u>, <u>Alvin Nelson El Amin4</u>, and <u>Laurene Mascola5</u> Author Affiliations

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3Public Health Laboratory

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5Acute Communicable Disease Control, Los Angeles County Department of Public Health, *Abstract*

Background. School-located influenza vaccination (SLV) programs can efficiently immunize large numbers of school-aged children. We evaluated the impact of SLV on laboratory-confirmed influenza and absenteeism.

Methods. Active surveillance for influenza-like illness (ILI) was conducted on 4455 children in 4 SLV intervention and 4 control elementary schools (grades K–6) matched for sociodemographic characteristics during the 2010–2011 influenza season in Los Angeles County, California. Combined nose/throat swabs were collected from febrile children with ILI at presentation to the school nurse or during absenteeism.

Results. In SLV schools, 26.9%–46.6% of enrolled students received at least 1 dose of either inactivated or live attenuated influenza vaccine compared with 0.8%–4.3% in control schools. Polymerase chain reaction for respiratory viruses (PCR) was performed on 1021 specimens

obtained from 898 children. Specimens were positive for influenza in 217 (21.3%), including 2009 H1N1 (30.9%), H3 (9.2%), and B (59.9%). Children attending SLV schools, regardless of vaccination status, were 30.8% (95% confidence interval, 10.1%-46.8%) less likely to acquire influenza compared with children at control schools. Unvaccinated children were indirectly protected in the school with nearly 50% vaccination coverage compared with control schools (influenza rate, 27.1 vs 60.0 per 1000 children; P = .023). Unvaccinated children missed more school days than vaccinated children (4.3 vs 2.8 days per 100 school days; P < .001). Conclusions. Vaccination of at least a quarter of the school population resulted in decreased influenza rates and improved school attendance. Herd immunity for unvaccinated children may occur in schools with vaccination coverage approaching 50%.

Clinical Therapeutics

Volume 36, Issue 7, p993-1126 July 2014 http://www.clinicaltherapeutics.com/current [New issue; No relevant content]

Cost Effectiveness and Resource Allocation

(Accessed 26 July 2014)

http://www.resource-allocation.com/

Methodology

Making use of equity sensitive QALYs: a case study on identifying the worse off across diseases

Frode Lindemark, Ole Frithjof Norheim and Kjell Arne Johansson

Author Affiliations

Cost Effectiveness and Resource Allocation 2014, 12:16 doi:10.1186/1478-7547-12-16

Published: 23 July 2014 Abstract (provisional)

Background

Resource allocation decisions currently lack standard quantitative methods for incorporating concerns about the worse off when analysing the cost-effectiveness of medical interventions. Objective

To explore and demonstrate how to identify who are the worse off without a new intervention by measuring lifetime Quality-Adjusted Life Years (QALYs) for patients across different conditions, and compare the results to using proportional shortfall of QALYs.

Methods

Case study of eight condition-intervention pairs that are relevant to priority setting in Norway; childhood deafness (unilateral cochlear implant), unruptured cerebral aneurysm (coiling), morbid obesity (RY gastric bypass), adult deafness (unilateral cochlear implant), atrial fibrillation (catheter ablation), hip osteoarthritis (hip replacement), rheumatoid arthritis (TNF inhibitor) and acute stroke (stroke unit). We extracted prospective QALYs without and with new interventions from published health technology assessments and economic evaluations. Results

Among the eight cases, the lifetime QALY method and the proportional shortfall method yielded conflicting worse-off rank orders. Particularly two conditions had a substantial shift in ranking across the applications of the two methods: childhood deafness and acute stroke. Deaf children had the lowest expected lifetime QALYs (38.5 without a cochlear implant) and were worst off

according to the lifetime approach, while patients with acute stroke had the second-highest lifetime QALYs (76.4 without stroke units). According to proportional shortfall of QALYs, patients with acute stroke were ranked as worse off than deaf children, which seems counterintuitive. Conclusion

This study shows that it is feasible to identify who are the worse off empirically by the application of lifetime QALYs and proportional shortfalls. These methods ease further examination of whether there is a true conflict between maximization and equity or whether these two concerns actually coincide in real world cases. It is yet to be solved whether proportional prospective health losses are more important than absolute shortfalls in expected lifetime health in judgements about who are worse off.

Current Opinion in Infectious Diseases

August 2014 - Volume 27 - Issue 4 pp: v-vi,303-401 http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx [Reviewed earlier]

Developing World Bioethics

August 2014 Volume 14, Issue 2 Pages ii—viii, 59–110 http://onlinelibrary.wiley.com/doi/10.1111/dewb.2014.14.issue-2/issuetoc [Reviewed earlier]

Development in Practice

<u>Volume 24</u>, Issue 3, 2014 <u>http://www.tandfonline.com/toc/cdip20/current</u> [Reviewed earlier]

Emerging Infectious Diseases

Volume 20, Number 8—August 2014 http://wwwnc.cdc.gov/eid/ [Reviewed earlier]

The European Journal of Public Health

Volume 24 Issue 4 August 2014

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

From global to local: vector-borne disease in an interconnected world

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Extract

World Health Day 2014 focused on vector-borne diseases, offering the opportunity to take stock of the remarkable persistence that diseases transmitted by ticks, mosquitoes and other arthropods have exhibited in recent years. It may be tempting to view vector-borne diseases as less of an issue for Europe than other regions of the world, but this would be a mistake. Over the past decade, continental Europe has been subject to local (autochthonous) transmission of the tropical diseases chikungunya and dengue, a Greek outbreak of malaria, significant outbreaks of West Nile virus and the continued geographic expansion of vectors such as the tick species Ixodes ricinus and the mosquito species Aedes albopictus.1

It is both important and revealing to interrogate the myriad factors driving vector-borne disease, particularly those factors that are not considered to be traditionally within the health sector. The risk of transmission can be seen as a function of interrelated and interdependent drivers that can interact on a global scale but manifest themselves locally...

Eurosurveillance

Volume 19, Issue 29, 24 July 2014

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

[New issue; No relevant content]

Global Health: Science and Practice (GHSP)

May 2014 | Volume 2 | Issue 2 http://www.ghspjournal.org/content/current [Reviewed earlier]

Globalization and Health

[Accessed 26 July 2014] http://www.globalizationandhealth.com/ [No new relevant content]

Global Public Health

Volume 9, Supplement 1, 2014

http://www.tandfonline.com/toc/rgph20/.Ug0DgeKy-F9#.U4onnCjDU1w

Special Issue: Afghanistan's health system: Moving forward in challenging

circumstances 2002-2013

Communicable disease control in Afghanistan

<u>Mohammad S. Ikram, Clydette L. Powell, Rashida A. Bano, Arshad D. Quddus, Syad K. Shah, Ellyn L. Ogden, Waqar R. Butt</u> & <u>Mohd Arshil Moideen</u>

pages S43-S57

DOI:10.1080/17441692.2013.826708

Abstract

Among public health challenges in Afghanistan, communicable diseases still predominate because the epidemiologic transition to chronic disease has not yet occurred. Afghanistan's 10-year journey to improve its response to communicable disease is reflected in varying degrees of progress and innovation, all while long-standing conflict and geographic inaccessibility limit outreach and effective service delivery to vulnerable populations. Although Afghanistan is close

to achieving polio elimination, other reportable communicable diseases are only slowly achieving their goals and objectives through targeted, sustained programmatic efforts. The introduction of disease early warning systems has allowed for identification and investigation of outbreaks within 48 hours. Tuberculosis case detection has risen over the last 10 years, and treatment success rates have been sustained at World Health Organization targets over the last 5 years at 85%. These successes are in large part due to increased government commitment, Global Fund support, training of community health workers and improved laboratory capabilities. Malaria cases dropped between 2002 and 2010. HIV/AIDS has been kept at low levels except in only certain sub-sectors of the population. In order to build on these achievements, Afghanistan will need a comprehensive strategy for all communicable diseases, with better human and infrastructure development, better multi-sectoral development and international collaboration.

Health Affairs

July 2014; Volume 33, Issue 7
http://content.healthaffairs.org/content/current
Theme: Using Big Data To Transform Care
[Reviewed earlier]

Health and Human Rights

Volume 16, Issue 1
http://www.hhrjournal.org/
Climate Justice and the Right to Health – A Special Issue
[Reviewed earlier]

Health Economics, Policy and Law

Volume 9 - Issue 03 - July 2014 http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue [Reviewed earlier]

Health Policy and Planning

Volume 29 Issue 4 July 2014 http://heapol.oxfordjournals.org/content/current [Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

September 2014 Volume 10, Issue 9
http://www.landesbioscience.com/journals/vaccines/toc/volume/10/issue/6/
Special focus: Vaccine acceptance
[Reviewed earlier]

Infectious Agents and Cancer

[Accessed 26 July 2014] http://www.infectagentscancer.com/content [No new relevant content]

Infectious Diseases of Poverty

[Accessed 26 July 2014] http://www.idpjournal.com/content [No new relevant content]

International Journal of Epidemiology

Volume 43 Issue 3 June 2014 http://ije.oxfordjournals.org/content/current [Reviewed earlier]

International Journal of Infectious Diseases

Vol 24 Complete | July 2014 | Pages 1-54 http://www.ijidonline.com/current [Reviewed earlier]

JAMA

July 23/30, 2014, Vol 312, No. 4 http://jama.jamanetwork.com/issue.aspx [Reviewed earlier]

JAMA Pediatrics

July 2014, Vol 168, No. 7 http://archpedi.jamanetwork.com/issue.aspx [Reviewed earlier]

Journal of Community Health

Volume 39, Issue 4, August 2014 http://link.springer.com/journal/10900/39/4/page/1 [Reviewed earlier]

Journal of Global Ethics

Volume 10, Issue 1, 2014 http://www.tandfonline.com/toc/rjge20/current#.U2V-Elf4L0l **Tenth Anniversary Forum: The Future of Global Ethics**[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)

Volume 6 | Issue 2 Page Nos. 57-92 April-June 2014 http://www.jgid.org/currentissue.asp?sabs=n [Reviewed earlier]

Journal of Health Care for the Poor and Underserved (JHCPU)

Volume 25, Number 2, May 2014

http://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.2 5.2.html

[Reviewed earlier]

Journal of Health Organization and Management

Volume 28 issue 4 - Latest Issue http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest [Reviewed earlier]

Journal of Immigrant and Minority Health

Volume 16, <u>Issue 4 – August 2014</u> http://link.springer.com/journal/10903/16/4/page/1 Special Focus: Health Care Barriers, Access, Quality, and Utilization [Reviewed earlier]

Journal of Infectious Diseases

Volume 210 Issue 3 August 1, 2014 http://jid.oxfordjournals.org/content/current [Reviewed earlier]

Journal of Medical Ethics

August 2014, Volume 40, Issue 8 http://jme.bmj.com/content/current [New issue; No relevant content]

Journal of Medical Microbiology

July 2014; 63 (Pt 7) http://jmm.sgmjournals.org/content/current [Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 3 Issue 2 June 2014 http://jpids.oxfordjournals.org/content/current [Reviewed earlier]

Journal of Pediatrics

Vol 165 | No. 1 | July 2014 | Pages 1-216 http://www.jpeds.com/current [Reviewed earlier]

Journal of Public Health Policy

Volume 35, Issue 2 (May 2014) http://www.palgrave-journals.com/jphp/journal/v35/n2/index.html [Reviewed earlier]

Journal of the Royal Society - Interface

September 6, 2014; 11 (98) http://rsif.royalsocietypublishing.org/content/current [Reviewed earlier]

Journal of Virology

August 2014, volume 88, issue 15 http://jvi.asm.org/content/current [Reviewed earlier]

The Lancet

Jul 26, 2014 Volume 384 Number 9940 p281 – 376 http://www.thelancet.com/journals/lancet/issue/current

Series: Every Newborn

<u>Can available interventions end preventable deaths in mothers, newborn babies,</u> and stillbirths, and at what cost?

Prof <u>Zulfiqar A Bhutta</u> PhD <u>a b</u>, <u>Jai K Das</u> MBA <u>b</u>, <u>Rajiv Bahl</u> PhD <u>c</u>, <u>Joy E Lawn</u> PhD <u>d e f</u>, <u>Rehana A Salam</u> MSc <u>b</u>, <u>Vinod K Paul</u> MD <u>g</u>, <u>M Jeeva Sankar</u> DM <u>g</u>, <u>Hannah Blencowe</u> PhD <u>d</u>, <u>Arjumand Rizvi</u> MSc <u>b</u>, <u>Victoria B Chou</u> PhD <u>h</u>, <u>Neff Walker</u> PhD <u>h</u>, for The Lancet Newborn Interventions Review Group, The Lancet Every Newborn Study Group *Summary*

Progress in newborn survival has been slow, and even more so for reductions in stillbirths. To meet Every Newborn targets of ten or fewer neonatal deaths and ten or fewer stillbirths per 1000 births in every country by 2035 will necessitate accelerated scale-up of the most effective care targeting major causes of newborn deaths. We have systematically reviewed interventions across the continuum of care and various delivery platforms, and then modelled the effect and cost of scale-up in the 75 high-burden Countdown countries. Closure of the quality gap through the provision of effective care for all women and newborn babies delivering in facilities could prevent an estimated 113 000 maternal deaths, 531 000 stillbirths, and 1·325 million neonatal deaths annually by 2020 at an estimated running cost of US\$4·5 billion per year (US\$0·9 per person). Increased coverage and quality of preconception, antenatal, intrapartum, and postnatal interventions by 2025 could avert 71% of neonatal deaths (1·9 million [range 1·6—

2·1 million]), 33% of stillbirths (0·82 million [0·60—0·93 million]), and 54% of maternal deaths (0·16 million [0·14—0·17 million]) per year. These reductions can be achieved at an annual incremental running cost of US\$5·65 billion (US\$1·15 per person), which amounts to US\$1928 for each life saved, including stillbirths, neonatal, and maternal deaths. Most (82%) of this effect is attributable to facility-based care which, although more expensive than community-based strategies, improves the likelihood of survival. Most of the running costs are also for facility-based care (US\$3·66 billion or 64%), even without the cost of new hospitals and country-specific capital inputs being factored in. The maximum effect on neonatal deaths is through interventions delivered during labour and birth, including for obstetric complications (41%), followed by care of small and ill newborn babies (30%). To meet the unmet need for family planning with modern contraceptives would be synergistic, and would contribute to around a halving of births and therefore deaths. Our analysis also indicates that available interventions can reduce the three most common cause of neonatal mortality—preterm, intrapartum, and infection-related deaths—by 58%, 79%, and 84%, respectively.

Public Health

Rwanda 20 years on: investing in life

Agnes Binagwaho, Paul E Farmer, Sabin Nsanzimana, Corine Karema, Michel Gasana, Jean de Dieu Ngirabega, Fidele Ngabo, Claire M Wagner, Cameron T Nutt, Thierry Nyatanyi, Maurice Gatera, Yvonne Kayiteshonga, Cathy Mugeni, Placidie Mugwaneza, Joseph Shema, Parfait Uwaliraye, Erick Gaju, Marie Aimee Muhimpundu, Theophile Dushime, Florent Senyana, Jean Baptiste Mazarati, Celsa Muzayire Gaju, Lisine Tuyisenge, Vincent Mutabazi, Patrick Kyamanywa, Vincent Rusanganwa, Jean Pierre Nyemazi, Agathe Umutoni, Ida Kankindi, Christian Ntizimira, Hinda Ruton, Nathan Mugume, Denis Nkunda, Espérance Ndenga, Joel M Mubiligi, Jean Baptiste Kakoma, Etienne Karita, Claude Sekabaraga, Emmanuel Rusingiza, Michael L Rich, Joia S Mukherjee, Joseph Rhatigan, Corrado Cancedda, Didi Bertrand-Farmer, Gene Bukhman, Sara N Stulac, Neo M Tapela, Cassia van der Hoof Holstein, Lawrence N Shulman, Antoinette Habinshuti, Matthew H Bonds, Michael S Wilkes, Chunling Lu, Mary C Smith-Fawzi, JaBaris D Swain, Michael P Murphy, Alan Ricks, Vanessa B Kerry, Barbara P Bush, Richard W Siegler, Cori S Stern, Anne Sliney, Tej Nuthulaganti, Injonge Karangwa, Elisabetta Pegurri, Ophelia Dahl, Peter C Drobac

Preview

Two decades ago, the genocide against the Tutsis in Rwanda led to the deaths of 1 million people, and the displacement of millions more. Injury and trauma were followed by the effects of a devastated health system and economy. In the years that followed, a new course set by a new government set into motion equity-oriented national policies focusing on social cohesion and people-centred development. Premature mortality rates have fallen precipitously in recent years, and life expectancy has doubled since the mid-1990s.

The Lancet Global Health

Aug 2014 Volume 2 Number 8 e431 - 487 http://www.thelancet.com/journals/langlo/issue/current **Editorial**

Moving the needle on neonatal and child health

Zoë Mullan

Preview

Babies and children feature heavily in this August issue of The Lancet Global Health, as well they should at a time when unfinished agendas are top of the agenda. In its 2014 report on the

Millennium Development Goals, released on July 7, the UN described the under-5 mortality goal as "slipping away from achievement by 2015". The research and opinion in this month's issue harnesses a variety of different angles from which to "move the needle" on neonatal and child health. How can we ensure that neonatal interventions reach the very poorest families who need them the most? Are we doing enough for children with tuberculosis? What is the role of malaria in low birthweight? And are there any unintended adverse consequences of the introduction of new vaccines in Africa?

Burden of childhood tuberculosis in 22 high-burden countries: a mathematical modelling study

Peter J Dodd, Elizabeth Gardiner, Renia Coghlan, James A Seddon

Estimated risk of placental infection and low birthweight attributable to

Plasmodium falciparum malaria in Africa in 2010: a modelling study

Patrick G T Walker, Feiko O ter Kuile, Tini Garske, Clara Menendez, Azra C Ghani

Effects of health-system strengthening on under-5, infant, and neonatal mortality: 11-year provincial-level time-series analyses in Mozambique

Quinhas F Fernandes, Bradley H Wagenaar, Laura Anselmi, James Pfeiffer, Stephen Gloyd, Kenneth Sherr

Effects of the introduction of new vaccines in Guinea-Bissau on vaccine coverage, vaccine timeliness, and child survival: an observational study

Dr <u>Ane B Fisker</u> PhD <u>a b, Linda Hornshøj</u> MD <u>a, Amabelia Rodrigues</u> PhD <u>a, Ibraima Balde</u> BSc <u>a, Manuel Fernandes a, Prof Christine S Benn</u> DMSc <u>a b, Prof Peter Aaby</u> DMSc <u>a b</u> <u>Summary</u>

Background

In 2008, the GAVI Alliance funded the introduction of new vaccines (including pentavalent diphtheria-tetanus-pertussis [DTP] plus hepatitis B and Haemophilus influenzae type b antigens) in Guinea-Bissau. The introduction was accompanied by increased vaccination outreach services and a more restrictive wastage policy, including only vaccinating children younger than 12 months. We assessed coverage of all vaccines in the Expanded Program on Immunizations before and after the new vaccines' introduction, and the implications on child survival. Methods

This observational cohort study used data from the Bandim Health Project, which has monitored vaccination status and mortality in randomly selected village clusters in Guinea-Bissau since 1990. We assessed the change in vaccination coverage using cohort data from children born in 2007 and 2009; analysed the proportion of children who received measles vaccine after 12 months of age using data from 1999—2006; and compared child mortality after age 12 months in children who had received measles vaccine and those who had not using data from 1999 to 2006.

Findings

The proportion of children who were fully vaccinated by 12 months of age was 53% (468 of 878) in the 2007 cohort and 53% (467 of 879) in the 2009 cohort (relative risk [RR] $1\cdot00$, 95% CI $0\cdot89-1\cdot11$). Coverage of DTP-3 and pentavalent-3 increased from 73% (644 of 878) in 2007 to 81% (712 of 879) in 2009 (RR $1\cdot10$, 95% CI $1\cdot04-1\cdot17$); by contrast, the coverage of measles vaccination declined from 71% (620 of 878) to 66% (577 of 879; RR $0\cdot93$, $0\cdot85-1\cdot01$). The effect of the changes was significantly different for DTP-3 coverage compared with measles vaccine coverage (p= $0\cdot002$). After 12 months of age, the adjusted mortality rate ratio was $0\cdot71$ (95% CI $0\cdot56-0\cdot90$) for children who had received measles vaccine compared with those who had not ($0\cdot59$ [$0\cdot43-0\cdot80$] for girls and $0\cdot87$ [$0\cdot62-1\cdot23$] for boys). Interpretation

The introduction of the new vaccination programme in 2008 was associated with increased coverage of DTP, but decreased coverage of measles vaccine. In 1999—2006, child mortality was higher in children who had not received measles vaccine than in those who had. Funding

DANIDA, European Research Council, the Danish Independent Research Council, European Union FP7 via OPTIMUNISE, and Danish National Research Foundation.

The Lancet Infectious Diseases

Aug 2014 Volume 14 Number 8 p657 - 778 http://www.thelancet.com/journals/laninf/issue/current [New issue; No relevant content]

Medical Decision Making (MDM)

August 2014; 34 (6) http://mdm.sagepub.com/content/current [New issue; No relevant content]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy
June 2014 Volume 92, Issue 2 Pages 167–405
http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue
[Reviewed earlier]

Nature

Volume 511 Number 7510 pp383-502 24 July 2014 http://www.nature.com/nature/current_issue.html [New issue; No relevant content]

Nature Immunology

August 2014, Volume 15 No 8 pp695-788 http://www.nature.com/ni/journal/v15/n6/index.html [New issue; No relevant content]

Nature Medicine

July 2014, Volume 20 No 7 pp689-793 http://www.nature.com/nm/journal/v20/n7/index.html [Reviewed earlier]

Nature Reviews Immunology

August 2014 Vol 14 No 8 http://www.nature.com/nri/journal/v14/n7/index.html

[New issue; No relevant content]

New England Journal of Medicine

July 24, 2014 Vol. 371 No. 4

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

[New issue; No relevant content]

The Pediatric Infectious Disease Journal

August 2014 - Volume 33 - Issue 8 pp: 789-891,e183-e218 http://journals.lww.com/pidj/pages/currenttoc.aspx [New issue; No relevant content]

Pediatrics

July 2014, VOLUME 134 / ISSUE 1 http://pediatrics.aappublications.org/current.shtml [Reviewed earlier]

Pharmaceutics

<u>Volume 6</u>, Issue 3 (September 2014), Pages 354http://www.mdpi.com/1999-4923/6/2 [Reviewed earlier]

Pharmacoeconomics

Volume 32, Issue 7, July 2014 http://link.springer.com/journal/40273/32/7/page/1 [Reviewed earlier]

PLoS One

[Accessed 26 July 2014] http://www.plosone.org/

Research Article

Acceptance of Vaccinations in Pandemic Outbreaks: A Discrete Choice Experiment

Domino Determann, Ida J. Korfage, Mattijs S. Lambooij, Michiel Bliemer, Jan Hendrik Richardus, Ewout W. Steyerberg, Esther W. de Bekker-Grob

Published: July 24, 2014

DOI: 10.1371/journal.pone.0102505

Abstract Background

Preventive measures are essential to limit the spread of new viruses; their uptake is key to their success. However, the vaccination uptake in pandemic outbreaks is often low. We aim to elicit how disease and vaccination characteristics determine preferences of the general public for new pandemic vaccinations.

Methods

In an internet-based discrete choice experiment (DCE) a representative sample of 536 participants (49% participation rate) from the Dutch population was asked for their preference for vaccination programs in hypothetical communicable disease outbreaks. We used scenarios based on two disease characteristics (susceptibility to and severity of the disease) and five vaccination program characteristics (effectiveness, safety, advice regarding vaccination, media attention, and out-of-pocket costs). The DCE design was based on a literature review, expert interviews and focus group discussions. A panel latent class logit model was used to estimate which trade-offs individuals were willing to make.

Results

All above mentioned characteristics proved to influence respondents' preferences for vaccination. Preference heterogeneity was substantial. Females who stated that they were never in favor of vaccination made different trade-offs than males who stated that they were (possibly) willing to get vaccinated. As expected, respondents preferred and were willing to pay more for more effective vaccines, especially if the outbreak was more serious (\in 6- \in 39 for a 10% more effective vaccine). Changes in effectiveness, out-of-pocket costs and in the body that advises the vaccine all substantially influenced the predicted uptake.

Conclusions

We conclude that various disease and vaccination program characteristics influence respondents' preferences for pandemic vaccination programs. Agencies responsible for preventive measures during pandemics can use the knowledge that out-of-pocket costs and the way advice is given affect vaccination uptake to improve their plans for future pandemic outbreaks. The preference heterogeneity shows that information regarding vaccination needs to be targeted differently depending on gender and willingness to get vaccinated.

PLoS Medicine

(Accessed 26 July 2014)
http://www.plosmedicine.org/
[No new relevant content]

PLoS Neglected Tropical Diseases

(Accessed 26 July 2014) http://www.plosntds.org/

<u>The Global Burden of Disease Study 2010: Interpretation and Implications for the Neglected Tropical Diseases</u>

Peter J. Hotez, Miriam Alvarado, María-Gloria Basáñez, Ian Bolliger, Rupert Bourne, Michel Boussinesq, Simon J. Brooker, Ami Shah Brown, Geoffrey Buckle, Christine M. Budke, Hélène Carabin, Luc E. Coffeng, Eric M. Fèvre, [...], Mohsen Naghavi

Published: July 24, 2014

DOI: 10.1371/journal.pntd.0002865

Introduction Excerpt

The publication of the Global Burden of Disease Study 2010 (GBD 2010) and the accompanying collection of Lancet articles in December 2012 provided the most comprehensive attempt to quantify the burden of almost 300 diseases, injuries, and risk factors, including neglected tropical diseases (NTDs) [1]–[3]. The disability-adjusted life year (DALY), the metric used in the

GBD 2010, is a tool which may be used to assess and compare the relative impact of a number of diseases locally and globally [4]-[6]. Table 1 lists the major NTDs as defined by the World Health Organization (WHO) [7] and their estimated DALYs [1]. With a few exceptions, most of the NTDs currently listed by the WHO [7] or those on the expanded list from PLOS Neglected Tropical Diseases [8] are disablers rather than killers, so the DALY estimates represent one of the few metrics available that could fully embrace the chronic effects of these infections. Even DALYs, however, do not tell the complete story of the harmful effects from NTDs. Some of the specific and potential shortcomings of GBD 2010 have been highlighted elsewhere [9]. Furthermore, DALYs measure only direct health loss and, for example, do not consider the economic impact of the NTDs that results from detrimental effects on school attendance and child development, agriculture (especially from zoonotic NTDs), and overall economic productivity [10], [11]. Nor do DALYs account for direct costs of treatment, surveillance, and prevention measures. Yet, economic impact has emerged as an essential feature of the NTDs, which may trap people in a cycle of poverty and disease [10]-[12]. Additional aspects not considered by the DALY metrics are the important elements of social stigma for many of the NTDs and the spillover effects to family and community members [13], [14], loss of tourism [15], and health system overload (e.g., during dengue outbreaks). Ultimately NTD control and elimination efforts could produce social and economic benefits not necessarily reflected in the DALY metrics, especially among the most affected poor communities [11]...

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

(Accessed 26 July 2014)
http://www.pnas.org/content/early/
[No new relevant content]

Pneumonia

Vol 5 (2014) https://pneumonia.org.au/index.php/pneumonia/issue/current Special Issue "Pneumonia Diagnosis" [Reviewed earlier]

Public Health Ethics

Volume 7 Issue 2 July 2014 http://phe.oxfordjournals.org/content/current [Reviewed earlier]

Qualitative Health Research

August 2014; 24 (8)
http://qhr.sagepub.com/content/current **Special Issue: Insights Into Mental Health**[New issue -No relevant content]

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

April 2014 Vol. 35, No. 4

http://www.paho.org/journal/index.php?option=com_content&view=article&id=143&Itemid=23 6&lang=en

[Reviewed earlier]

Risk Analysis

June 2014 Volume 34, Issue 6 Pages 981–1159 http://onlinelibrary.wiley.com/doi/10.1111/risa.2014.34.issue-6/issuetoc [Reviewed earlier]

Science

25 July 2014 vol 345, issue 6195, pages 353-480 http://www.sciencemag.org/current.dtl

In Depth

Infectious Diseases

Ebola drugs still stuck in lab

Martin Enserink

Summary

With 1048 reported cases and 632 deaths since March, the West African Ebola outbreak shows no signs of tapering off and has even reached several capital cities. Several drugs and vaccines are in development against the virus, some of which have already shown great promise in animals, but have not completed human safety tests. As the outbreak worsened, debates intensified among scientists, government officials, and company executives about bringing some of these unapproved products to Africa on a so-called compassionate use basis. But the organizations fighting Ebola on the ground say they can't bring an untested, unlicensed drug or vaccine to a population that's already distrustful of the teams fighting the outbreak.

Social Science & Medicine

Volume 115, <u>In Progress</u> (August 2014) http://www.sciencedirect.com/science/journal/02779536/115 [Reviewed earlier]

Tropical Medicine and Health

Vol. 42(2014) No. 2 https://www.jstage.jst.go.jp/browse/tmh/42/1/ contents [Website unavailable]

Vaccine

Volume 32, Issue 36, Pages 4599-4702 (6 August 2014) http://www.sciencedirect.com/science/journal/0264410X/32/36 Commentary

The most ambitious vaccine introduction in history

Elizabeth Miller

Pages 4599-4601

No abstract; Excerpt from initial text

...The Global Polio Eradication Initiative's (GPEI) "Polio Eradication and Endgame Strategic Plan 2013–2018" calls for IPV introduction in these countries by the end of 2015. This schedule is unprecedented in its speed and scope, and must be accompanied by concerted action in key countries to strengthen their immunization systems. But if done right, IPV introduction has the potential to be a uniquely rewarding achievement in public health....

<u>Determinants of uptake of influenza vaccination among pregnant women – A systematic review</u>

Review Article

Carol Yuet Sheung Yuen, Marie Tarrant

Pages 4602-4613

Abstract

Background

Pregnant women have the highest priority for seasonal influenza vaccine. However, suboptimal coverage has been repeatedly noted in this population. To improve vaccine uptake, reviewing the determinants of vaccination is of increasing importance.

Methods

A detailed literature search was performed up to November 30, 2013 to retrieve articles related to uptake of influenza vaccination during pregnancy.

Results

Forty-five research papers were included in the review. Twenty-one studies assessed the coverage of seasonal influenza vaccination, 13 studies assessed coverage of A/H1N1 pandemic vaccination and 11 studies assessed both. Vaccination uptake ranged from 1.7% to 88.4% for seasonal influenza, and from 6.2% to 85.7% for A/H1N1 pandemic influenza. Many pregnant women were unaware that they were at high risk for influenza and its complications during pregnancy. They were also more likely to underestimate the threat of influenza to themselves and their fetus. Moreover, they had substantial concerns about the safety and efficacy of the influenza vaccine during pregnancy. Negative media reports contributed to the perception that influenza vaccination during pregnancy was risky and could result in adverse pregnancy outcomes. Although health care providers' (HCPs) recommendations were consistently associated with vaccine uptake, most did not recommend the vaccine to their pregnant clients. Conclusions

Influenza vaccination uptake among pregnant women is suboptimal and HCPs rarely recommend it. Positive vaccination recommendations from HCPs as well as direct access to the vaccine would likely substantially improve vaccination acceptance.

Engaging parents and schools improves uptake of the human papillomavirus (HPV) vaccine: Examining the role of the public health nurse

Original Research Article

Noella W. Whelan, Audrey Steenbeek, Ruth Martin-Misener, Jeffrey Scott, Bruce Smith, Holly D'Angelo-Scott

Pages 4665-4671

Abstract

Background

Nova Scotia has the highest rate of cervical cancer in Canada, and most of these cases are attributed to the Human Papillomavirus (HPV). In 2007, Gardasil® was approved and

implemented in a successful school-based HPV immunization program. Little is known, however, which strategies (if any) used within a school-based program help to improve vaccine uptake. Methods

A retrospective, exploratory correlation study was conducted to examine the relationship between school-based strategies and uptake of HPV vaccine. Data was analyzed through Logistic regression, using PASW Statistics 17 (formerly SPSS 17). Results

HPV vaccine initiation was significantly associated with Public Health Nurses providing reminder calls for: consent return (p = 0.017) and missed school clinic (p = 0.004); HPV education to teachers (p < 0.001), and a thank-you note to teachers (p < 0.001). Completion of the HPV series was associated with vaccine consents being returned to the students' teacher (p = 0.003), and a Public Health Nurse being assigned to a school (p = 0.025). Conclusions

These findings can be used to help guide school-based immunization programs for optimal uptake of the HPV vaccine among the student population.

Evaluation of the measles, mumps and rubella vaccination catch-up campaign in England in 2013

Original Research Article

Benedetto Simone, Sooria Balasegaram, Maya Gobin, Charlotte Anderson, André Charlett, Louise Coole, Helen Maguire, Tom Nichols, Chas Rawlings, Mary Ramsay, Isabel Oliver Pages 4681-4688

Abstract

In January–March 2013 in England, confirmed measles cases increased in children aged 10–16 years. In April–September 2013, the National Health System and Public Health England launched a national measles-mumps-rubella (MMR) campaign based on data from Child Health Information Systems (CHIS) estimating that approximately 8% in this age group were unvaccinated. We estimated coverage at baseline, and, of those unvaccinated (target), the proportion vaccinated up to 20/08/2013 (mid-point) to inform further public health action.

We selected a sample of 6644 children aged 10–16 years using multistage sampling from those reported unvaccinated in CHIS at baseline and validated their records against GP records. We adjusted the CHIS MMR vaccine coverage estimates correcting by the proportion of vaccinated children obtained through sample validation.

We validated 5179/6644 (78%) of the sample records. Coverage at baseline was estimated as 94.7% (95% confidence intervals, CI: 93.5–96.0%), lower in London (86.9%, 95%CI: 83.0–90.9%) than outside (96.1%, 95%CI 95.5–96.8%). The campaign reached 10.8% (95%CI: 7.0–14.6%) of the target population, lower in London (7.1%, 95%CI: 4.9–9.3) than in the rest of England (11.4%, 95%CI: 7.0–15.9%). Coverage increased by 0.5% up to 95.3% (95% CI: 94.1–96.4%) but an estimated 210,000 10–16 year old children remained unvaccinated nationally.

Baseline MMR coverage was higher than previously reported and was estimated to have reached the 95% campaign objective at midpoint. Eleven per cent of the target population were vaccinated during the campaign, and may be underestimated, especially in London. No further national campaigns are needed but targeted local vaccination activities should be considered.

Vaccine: Development and Therapy

(Accessed 26 July 2014)

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

[No new relevant content]

Vaccines — Open Access Journal

(Accessed 26 July 2014)
http://www.mdpi.com/journal/vaccines
[No new relevant content]

Value in Health

Vol 17 | No. 4 | June 2014 | Pages 307-490 http://www.valueinhealthjournal.com/current [Reviewed earlier]

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

No new content identified

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 26 July 2014 [No new, unique, relevant content]

The Atlantic

http://www.theatlantic.com/magazine/ Accessed 26 July 2014 [No new, unique, relevant content]

BBC

http://www.bbc.co.uk/

Accessed 26 July 2014
[No new, unique, relevant content]

Brookings

http://www.brookings.edu/ Accessed 26 July 2014 [No new, unique, relevant content]

Council on Foreign Relations

http://www.cfr.org/ Accessed 26 July 2014 Op-Ed

This Is What We Lost Aboard Malaysia Airways Flight MH17

by Laurie Garrett July 18, 2014

Laurie Garrett discusses the significanct loss of several AIDS researchers who perished in the Malaysia Aiways Flight MH17 crash.

Economist

http://www.economist.com/ Accessed 26 July 2014 [No new, unique, relevant content]

Financial Times

http://www.ft.com Accessed 26 July 2014 [No new, unique, relevant content]

Forbes

http://www.forbes.com/ Accessed 26 July 2014 [No new, unique, relevant content]

Foreign Affairs

http://www.foreignaffairs.com/ Accessed 26 July 2014 [No new, unique, relevant content]

Foreign Policy

http://www.foreignpolicy.com/ Accessed 26 July 2014 [No new, unique, relevant content]

The Guardian

http://www.guardiannews.com/ Accessed 26 July 2014

Cholera vaccine: the guick-fix to the South Sudan outbreak? | Global ...

4 days ago ... Evidence is mounting that vaccines can stop cholera outbreaks, but NGOs fear this solution distracts from improving sanitation...

The Huffington Post

http://www.huffingtonpost.com/ Accessed 26 July 2014 [No new, unique, relevant content]

Le Monde

http://www.lemonde.fr/ Accessed 26 July 2014 [No new, unique, relevant content]

New Yorker

http://www.newyorker.com/ Accessed 26 July 2014 [No new, unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 26 July 2014 [No new, unique, relevant content]

Reuters

http://www.reuters.com/ Accessed 26 July 2014 [No new, unique, relevant content]

Wall Street Journal

http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 26 July 2014
[No new, unique, relevant content]

Washington Post

http://www.washingtonpost.com/

Accessed 26 July 2014

How can we convince parents to vaccinate? Acknowledge their fears.

A new PBS documentary suggests that we need to acknowledge parents' fears and help them learn to manage risk.

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members Janssen, Pfizer, and Sanofi Pasteur U.S. (list in formation), and the Developing Countries Vaccine Manufacturers Network (<u>DCVMN</u>). Support is also provided by a growing list of individuals who use this membership service to support their roles in public health, clinical practice, government, NGOs and other international institutions, academia and research organizations, and industry.

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