

Vaccines and Global Health: The Week in Review 21 December 2013 Center for Vaccine Ethics & Policy (CVEP)

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

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The International AIDS Vaccine Initiative (IAVI) announced a US\$378,000 grant from the Robert Wood Johnson Foundation to "convene international scientists and public-health experts to explore the creation of a Human Vaccines Project that could collectively leverage technological advances to accelerate the development of new vaccines against AIDS, tuberculosis, malaria, and other major diseases." Wayne C. Koff, IAVI Chief Scientific Officer and Principal Investigator of the grant, commented, "New approaches are critically needed. Despite major advances in vaccine discovery and immune-system monitoring, common questions hinder development of vaccines against many diseases. Solving these transvaccinology questions in a global consortium could be transformative for individual and public health. IAVI is once again proud to serve as a catalyst in cutting-edge science by convening a forum to open this conversation."

Dr. Koff and eight fellow scientists wrote in <u>Science</u> (May 2013) describing a Human Vaccines Project which would aim to identify and prioritize the questions to solve. With support from the Robert Wood Johnson Foundation, IAVI will host three workshops to explore the viability, potential impact, and requirements of such a project. The first workshop, in February, will gather internationally recognized representatives from academia, the vaccine industry, government, and product-development partnerships and other non-government organizations to help identify needs and craft a potential scientific plan.

"There are many viral, bacterial, parasitic, and chronic diseases for which vaccines are needed," said Stanley Plotkin, Emeritus Professor of the University of Pennsylvania and Chairman of the Human Vaccines Project Steering Committee. "This Project holds the potential to greatly accelerate the development of vaccines against major global killers, and provide a foundation for future prevention of new and emerging diseases."

http://www.iavi.org/Information-Center/Press-Releases/Pages/IAVI-Receives-RWJF-Grant-to-Catalyze-a-Human-Vaccines-Project.aspx

The Bill & Melinda Gates Foundation selected Susan Desmond-Hellmann, M.D., M.P.H. as its next chief executive officer. Dr. Desmond-Hellmann is currently the chancellor of the University of California, San Francisco (UCSF), and will assume her role on May 1, 2014. An oncologist by training, Desmond-Hellmann is "a recognized leader on issues of higher education, public health, drug development, regulatory innovation and health policy. She has led UCSF since August 2009, when she became the first woman to serve as the university's chancellor, overseeing all aspects of the university and medical center's strategy, academic programs and operations. She has extensive experience in product development, and a deep understanding of how to bridge applied research to delivery of product. Prior to her tenure at UCSF, she was President of Product Development at Genentech, where she led the development and introduction of two of the first gene-targeted therapies for cancer, Avastin and Herceptin." Desmond-Hellmann also served as a member of Genentech's executive committee, beginning in 1996. She sits on the boards of directors of Proctor and Gamble and Facebook, and was previously a member of the Federal Reserve Bank of San Francisco's Economic Advisory Council. Desmond-Hellmann will take over from Jeff Raikes, who announced his retirement from the foundation in September 2013 after five years as CEO. http://www.gatesfoundation.org/Media-Center/Press-Releases/2013/12/Susan-Desmond-Hellmann-Named-Chief-Executive-Officer-of-the-Bill-and-Melinda-Gates-Foundation

Update: Polio this week - As of 18 December 2013

Global Polio Eradication Initiative

Full report: http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx [Editor's extract and bolded text]

As the year 2013 draws to a close, the GPEI takes stock:

- :: In Afghanistan, no indigenous cases of wild poliovirus have occurred all year all cases are linked to cross-border transmission with neighbouring Pakistan.
- :: In Nigeria, poliovirus is increasingly geographically restricted primarily to Kanod and Borno states. Over the past 4 months, only four cases have occurred in the country, despite the onset of the rainy season (the "high season" for polio transmission).
- :: The Horn of Africa outbreak is on the decline, including in Banadir, Somalia, the "engine" of the outbreak (no cases since July).
- :: A cross-regional emergency approach is being implemented in the Middle East.
- :: In Pakistan, the main reservoir area is Federally Administered Tribal Areas (FATA), in particular North Waziristan. During the 'high season' in the past four months, 52 cases of wild poliovirus have been reported from FATA, with evidence of widespread geographic transmission across the country. Areas within Pakistan are being re-infected, as is neighbouring Afghanistan, and the outbreak in the Middle East originated in Pakistan.
- :: The overriding operational priority for the GPEI is to ensure all children are reached during supplementary immunization activities during the 2014 'low season' for polio transmission.

Pakistan

:: One new WPV1 case was reported in the past week from North Waziristan, FATA. The total number of WPV1 cases for Pakistan in 2013 is now 75. The most recent WPV1 case had onset of paralysis on 26 November (from North Waziristan, FATA).

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

The **Weekly Epidemiological Record (WER) for 3 January 2014,** vol. 89, 1 (pp. 1–20) includes:

:: Meeting of the Strategic Advisory Group of Experts on immunization, November 2013 – conclusions and recommendations

http://www.who.int/entity/wer/2014/wer8901.pdf

Ecobank and the Global Fund announced a partnership that includes innovative financing, advocacy and cash contributions worth a total of US\$3 million over the next three years. Ecobank and the Ecobank Foundation "will partner with the Global Fund in innovative regional and country specific financing programs that will aim to strengthen the financial management capabilities of grant recipients. Ecobank will also contribute training in financial management skills, accounting and reporting expected to facilitate improved grant applications, as well as the implementation and evaluation processes." Ecobank is described as a leading pan-African financial institution that operates in 35 countries in Africa and embraces a mission of contributing to the economic and financial development of Africa. Ecobank will provide advocacy for the Global Fund, and call on the innovative capabilities of its partners and over 18,000 employees. Ecobank will contribute US\$1.5 million in cash, and half will be earmarked for strengthening the financial management capabilities of implementing partners. Additional contributions will include in-kind services, training and fundraising. http://www.theglobalfund.org/en/mediacenter/newsreleases/2013-12-19 Ecobank and the Global Fund Launch Partnership/

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

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

:: Middle East respiratory syndrome coronavirus (MERS-CoV) - update <u>17 December</u> 2013

:: Human infection with avian influenza A(H7N9) virus – update 17 December 2013

Humanitarian Health Action

:: Health Cluster Philippines

The United Nations has developed the cluster system to help governments coordinate the foreign assistance offered in humanitarian disasters. In the Philippines, the Department of Health is the lead of the Health Cluster, with WHO as co-lead. There are currently three Health Situation reports

<u>Typhoon Yolanda Health Cluster Bulletin</u> 18 <u>December 2013</u> <u>pdf, 2.85Mb</u> **EWARN Weekly Summary Report**

8-14 December 2013

pdf, 1.95Mb

News releases

Rebuilding health system in areas hit by Yolanda key to region's recovery

20 December 2013

WHO recommendations for mental health support in emergencies shared with DoH

16 December 2013

GAVI Watch: Media Releases/Statements [to 21 December 2013]

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

No new relevant content

UNICEF Watch

http://www.unicef.org/media/media 67204.html

No new relevant content

CDC/MMWR Watch [to 21 December 2013]

No new relevant content

European Medicines Agency Watch [to 21 December 2013]

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

No new relevant content

UN Watch [to 21 December 2013]

Selected meetings, press releases, and press conferences relevant to immunization, vaccines, infectious diseases, global health, etc. http://www.un.org/en/unpress/
No new relevant content

World Bank/IMF Watch [to 21 December 2013]

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

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

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

Report: The Outbreaks – Protecting Americans from Infectious Diseases

Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF), December 2013

http://www.healthyamericans.org/assets/files/TFAH2013OutbreaksRpt11.pdf

Abstract [Excerpt with bolded text by Editor]

The report finds that a majority of states (32) score 5 or lower out of 10 key indicators of policies and capabilities to protect against infectious disease threats. Three states tied for the lowest score, achieving two out of 10 possible indicators - Georgia, Nebraska and New Jersey. New Hampshire had the highest score, with 8 out of 10.

Some key findings include:

- :: One-third of states do not require healthcare facilities to report healthcare-associated infections (HAI). Approximately one out of every 20 hospitalized patients will contract a HAI.
- :: Only one-quarter of states vaccinated at-least half of their population against the seasonal flu. The U.S. Centers for Disease Control and Prevention (CDC) recommends all Americans ages 6 months and older get vaccinated. Twenty percent of Americans get the flu each year.
- :: Only two states (Connecticut and Delaware) and Washington, D.C. meet the U.S. Department of Health and Human Services (HHS) goal of vaccinating at least 90 percent of preschoolers (19- to 35-month olds) against the whooping cough.
- :: Fewer than half of states require human papillomavirus (HPV) vaccinations, education for parents about the vaccine or funding for vaccinations. CDC and the American Academy of Pediatrics recommend the vaccination for both males and females at 11 or 12 years of age.
- :: One-third of states do not cover routine HIV screening under their Medicaid program. More than 1.1 million Americans are living with HIV/AIDS, and almost one in five do not know they are infected.
- :: Just over half of public health laboratories did not test their Continuity of Operations (COOP) plans either through a drill or real event last year.
- :: Two-thirds of states decreased funding for public health from Fiscal Year (FY) 2011-12 to FY 2012-13.

The report's provides a series of recommendations that address many of the major gaps in infectious disease control and prevention, including:

- :: Strengthening fundamental capabilities maintaining an expert workforce and giving them state-of-the-art tools required to conduct investigations to quickly detect, control and treat disease outbreaks;
- :: Countering antibiotic resistance and prioritizing research and development of medical countermeasures should be top health and national security priorities;
- :: Increasing the number of Americans receiving recommended vaccinations and routine screenings for particular diseases, since these are the safest and most effective ways to reduce infectious diseases in the United States;
- :: Modernizing disease surveillance and ensuring public health laboratories have the equipment and capacity to not only test for routine problems like foodborne illnesses but also for new and large-scale threats like bioterrorism or a pandemic;
- :: Supporting policies and incentives to reduce the number of healthcare-associated infections, ensuring Americans can receive safe care;
- :: Improving global coordination to prevent and contain emerging new illnesses like MERS while maintaining defenses against "old-school" threats like malaria and tuberculosis;
- :: Shoring up the nation's public health preparedness capabilities to respond to major disease outbreaks or acts of bioterrorism to ensure new threats can be rapidly identified and contained; and

:: Countering complacency around HIV/AIDS, hepatitis B and C (HBV and HCV) and tuberculosis—including countering an alarming rise in new HIV infections among young gay men, and screening millions of Baby Boomers who may be infected with HCV and do not know they are at risk for developing serious liver disease as they age.

Report: The Global Crisis of Drug-Resistant Tuberculosis and Leadership of China and the BRICS: Challenges and Opportunities - Summary of a Joint Workshop IOM

December 19, 2013

http://iom.edu/Reports/2013/The-Global-Crisis-of-Drug-Resistant-Tuberculosis-and-Leadership-of-China-and-the-BRICS.aspx

Note: Workshop Summaries contain the opinion of the presenters, but do NOT reflect the conclusions of the IOM.

Abstract

Although antibiotics to treat tuberculosis (TB) were developed in the 1950s and are effective against a majority of TB cases, resistance to these antibiotics has emerged over the years, resulting in the growing spread of drug-resistant TB. Since 2008, the IOM Forum on Drug Discovery, Development, and Translation has hosted or co-hosted six domestic and international workshops to address the global crisis of drug-resistant TB. The Forum held international workshops in South Africa and Russia in 2010, and in India in 2011.

On January 16-18, 2013, The IOM along with the Institute of Microbiology of the Chinese Academy of Sciences held a workshop to address the current status of drug-resistant TB globally and in China. Among other topics, participants at the workshop considered the opportunities for emerging leadership in drug-resistant TB control from Brazil, Russia, India, China, and South Africa (the BRICS countries), and discussed innovative strategies to advance and harmonize local and international efforts to prevent and treat drug-resistant TB. This document summarizes the workshop.

WHO: The right to health

Fact sheet N°323

Reviewed November 2013 http://www.who.int/mediacentre/factsheets/fs323/en/index.html
http://www.who.int/mediacentre/factsheets/fs323/en/index.html
https://www.who.int/mediacentre/factsheets/fs323/en/index.html
<a href="https://www.who.int/mediacentre/factsheets/fs323/en/index

Key facts

- :: The WHO Constitution enshrines the highest attainable standard of health as a fundamental right of every human being.
- :: The right to health includes access to timely, acceptable, and affordable health care of appropriate quality.
- :: Yet, about 150 million people globally suffer financial catastrophe annually, and 100 million are pushed below the poverty line as a result of health care expenditure.
- :: The right to health means that States must generate conditions in which everyone can be as healthy as possible. It does not mean the right to be healthy.
- :: Vulnerable and marginalized groups in societies tend to bear an undue proportion of health problems.

The right to health means that governments must generate conditions in which everyone can be as healthy as possible. Such conditions range from ensuring availability of health services, healthy and safe working conditions, adequate housing and nutritious food. The right to health does not mean the right to be healthy...

General Comment on the Right to Health

To clarify and operationalize the above provisions, the UN Committee on Economic, Social and Cultural Rights, which monitors compliance with the ICESCR, adopted a General Comment on the Right to Health in 2000.

The General Comment states that the right to health extends not only to timely and appropriate health care but also to the underlying determinants of health, such as access to safe and potable water and adequate sanitation, an adequate supply of safe food, nutrition and housing, healthy occupational and environmental conditions, and access to health-related education and information, including on sexual and reproductive health.

According to the General Comment, the right to health contains four elements:

- :: Availability: A sufficient quantity of functioning public health and health care facilities, goods and services, as well as programmes.
- :: Accessibility: Health facilities, goods and services accessible to everyone. Accessibility has four overlapping dimensions:
 - non-discrimination
 - physical accessibility
 - economical accessibility (affordability)
 - information accessibility.
- :: Acceptability: All health facilities, goods and services must be respectful of medical ethics and culturally appropriate as well as sensitive to gender and life-cycle requirements.
- :: Quality: Health facilities, goods and services must be scientifically and medically appropriate and of good quality.

The right to health, like all human rights, imposes on States Parties three types of obligations. :: Respect: This means simply not to interfere with the enjoyment of the right to health ("do no harm").

- :: Protect: This means ensuring that third parties (non-state actors) do not infringe upon the enjoyment of the right to health (e.g. by regulating non-state actors).
- :: Fulfil: This means taking positive steps to realize the right to health (e.g. by adopting appropriate legislation, policies or budgetary measures)...

Journal Watch

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

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

The American Journal of Bioethics

Volume 13, Issue 12, 2013

http://www.tandfonline.com/toc/uajb20/current#.Uhk8Az_hflY

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

[Reviewed earlier]

American Journal of Infection Control

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

American Journal of Preventive Medicine

Volume 46, Issue 1, Pages 1-9, January 2014

http://www.ajpmonline.org/current

Seasonal Influenza Vaccination at School: A Randomized Controlled Trial

Sharon G. Humiston, Stanley J. Schaffer, Peter G. Szilagyi, Christine E. Long, et al. http://www.ajpmonline.org/article/S0749-3797%2813%2900537-0/abstract

Abstract

Background

Influenza vaccination coverage for U.S. school-aged children is below the 80% national goal. Primary care practices may not have the capacity to vaccinate all children during influenza vaccination season. No real-world models of school-located seasonal influenza (SLV-I) programs have been tested.

Purpose

Determine the feasibility, sustainability, and impact of an SLV-I program providing influenza vaccination to elementary school children during the school day.

Design

In this pragmatic randomized controlled trial of SLV-I during two vaccination seasons, schools were randomly assigned to SLV-I versus standard of care. Seasonal influenza vaccine receipt, as recorded in the state immunization information system (IIS), was measured.

Setting/participants

Intervention and control schools were located in a single western New York county. Participation (intervention or control) included the sole urban school district and suburban districts (five in Year 1, four in Year 2).

Intervention

After gathering parental consent and insurance information, live attenuated and inactivated seasonal influenza vaccines were offered in elementary schools during the school day. Main outcome measures

Data on receipt of ≥1 seasonal influenza vaccination in Year 1 (2009–2010) and Year 2 (2010–2011) were collected on all student grades K through 5 at intervention and control schools from the IIS in the Spring of 2010 and 2011, respectively. Additionally, coverage achieved through SLV-I was compared to coverage of children vaccinated elsewhere. Preliminary data analysis for Year 1 occurred in Spring 2010; final quantitative analysis for both years was completed in late Fall 2012.

Results

Results are shown for 2009–2010 and 2010–2011, respectively: Children enrolled in suburban SLV-I versus control schools had vaccination coverage of 47% vs 36%, and 52% vs 36%

(p<0.0001 both years). In urban areas, coverage was 36% vs 26%, and 31% vs 25% (p<0.001 both years). On multilevel logistic analysis with three nested levels (student, school, school district) during both vaccination seasons, children were more likely to be vaccinated in SLV-I versus control schools; ORs were 1.6 (95% CI=1.4, 1.9; p<0.001) and 1.5 (95% CI=1.3, 1.8; p<0.001).

Conclusions

Delivering influenza vaccine during school is a promising approach to improving pediatric influenza vaccination coverage.

Trial Registry

ClinicalTrials.govNCT01224301

Physicians' Human Papillomavirus Vaccine Recommendations, 2009 and 2011

Susan T. Vadaparampil, PhD, Teri L. Malo, PhD, Jessica A. Kahn, MD, Daniel A. Salmon, PhD, Ji-Hyun Lee, DrPH, Gwendolyn P. Quinn, PhD, Richard G. Roetzheim, MD, Karen L. Bruder, MD, Tina M. Proveaux, BS, Xiuhua Zhao, MPH, Neal A. Halsey, MD, Anna R. Giuliano, PhD Abstract

Background

Physician recommendation is a key predictor of human papillomavirus (HPV) vaccine uptake. Understanding factors associated with recommendation is important for efforts to increase current suboptimal vaccine uptake.

Purpose

This study aimed to examine physician recommendations to vaccinate female patients aged 11–26 years, in 2009 and 2011, at 3 and 5 years postvaccine licensure, respectively. A second aim was to identify trends in factors associated with vaccine recommendation for ages 11 and 12 years.

Methods

Nationally representative samples of physicians practicing family medicine, pediatrics, and obstetrics and gynecology were randomly selected from the American Medical Association Physician Masterfile (n=1538 in 2009, n=1541 in 2011). A mailed survey asked physicians about patient and clinical practice characteristics; immunization support; and frequency of HPV vaccine recommendation ("always" $\geq 75\%$ of the time vs other). Analyses were conducted in 2012.

Results

Completed surveys were received from 1013 eligible physicians (68% response rate) in 2009 and 928 (63%) in 2011. The proportion of physicians who reported always recommending HPV vaccine increased significantly from 2009 to 2011 for patients aged 11 or 12 years (35% vs 40%, respectively; p=0.03), but not for patients aged 13–17 years (53% vs 55%; p=0.28) or 18–26 years (50% vs 52%; p=0.52). Physician specialty, age, and perceived issues/barriers to vaccination were associated with vaccine recommendation for patients aged 11 or 12 in both years.

Conclusions

Results suggest a modest increase in recommendations for HPV vaccination of girls aged 11 or 12 years over a 2-year period; however, recommendations remain suboptimal for all age groups despite national recommendations for universal immunization.

American Journal of Public Health

Volume 104, Issue 1 (January 2014)

http://ajph.aphapublications.org/toc/ajph/current

Reaching Children Never Previously Vaccinated for Influenza Through a School-Located Vaccination Program

<u>Susan M. Kansagra, Vikki Papadouka, Anita Geevarughese, Michael A. Hansen, Kevin J. Konty,</u> Jane R. Zucker

American Journal of Public Health: January 2014, Vol. 104, No. 1: e45–e49. http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2013.301671 Abstract

Objectives. We determined the success of the school-located vaccination (SLV) program, implemented in 2009 in New York City to deliver pandemic influenza A (H1N1) monovalent vaccine (pH1N1), versus provider offices in reaching children who had never previously received influenza vaccine.

Methods. We compared the immunization history of children vaccinated in school versus provider offices. We included records in the Citywide Immunization Registry with pH1N1 administered between October 2009 and March 2010 to elementary school-aged children. Results. In total, 96 524 children received pH1N1 vaccine in schools, and 102 933 children received pH1N1 vaccine in provider offices. Of children vaccinated in schools, 34% had never received seasonal influenza vaccination in the past, compared with only 10% of children vaccinated at provider offices (P < .001). Children vaccinated in schools were more likely to have received a second dose of pH1N1 in 2009–2010 than those vaccinated in provider offices (80% vs 45%).

Conclusions. The SLV program was more successful at reaching children who had never received influenza immunization in the past and should be considered as a strategy for delivering influenza vaccine in routine and emergency situations.

Effect of Vaccination Coordinators on Socioeconomic Disparities in Immunization Among the 2006 Connecticut Birth Cohort

<u>Jessica A. Kattan, Kathy S. Kudish, Betsy L. Cadwell, Kristen Soto, James L. Hadler</u> American Journal of Public Health: January 2014, Vol. 104, No. 1: e74–e81. http://ajph.aphapublications.org/doi/abs/10.2105/AJPH.2013.301418 *Abstract*

Objectives. We examined socioeconomic status (SES) disparities and the influence of state Immunization Action Plan—funded vaccination coordinators located in low-SES areas of Connecticut on childhood vaccination up-to-date (UTD) status at age 24 months. Methods. We examined predictors of underimmunization among the 2006 birth cohort (n = 34 568) in the state's Immunization Information System, including individual demographic and SES data, census tract SES data, and residence in an area with a vaccination coordinator. We conducted multilevel logistic regression analyses.

Results. Overall, 81% of children were UTD. Differences by race/ethnicity and census tract SES were typically under 5%. Not being UTD at age 7 months was the strongest predictor of underimmunization at age 24 months. Among children who were not UTD at age 7 months, only Medicaid enrollment (adjusted odds ratio [AOR] = 0.6; 95% confidence interval [CI] = 0.5, 0.7) and residence in an area with a vaccination coordinator (AOR = 0.7; 95% CI = 0.6, 0.9) significantly decreased the odds of subsequent underimmunization.

Conclusions. SES disparities associated with underimmunization at age 24 months were limited. Efforts focused on vaccinating infants born in low SES circumstances can minimize disparities.

American Journal of Tropical Medicine and Hygiene

December 2013; 89 (6)

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

[Reviewed earlier]

Annals of Internal Medicine

17 December 2013, Vol. 159. No. 12 http://annals.org/issue.aspx
[No relevant content]

BMC Public Health

(Accessed 21 December 2013)

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

Parental information-seeking behaviour in childhood vaccinations

Irene A Harmsen, Gemma G Doorman, Liesbeth Mollema, Robert AC Ruiter, Gerjo Kok, Hester E de Melker

BMC Public Health 2013, 13:1219 (21 December 201

Abstract (provisional)

Background

People want to be well informed and ask for more information regarding their health. The public can use different sources (i.e. the Internet, health care providers, friends, family, television, radio, and newspapers) to access information about their health. Insight into the types and sources of vaccine related information that parents use, and reasons why they seek extra information is needed to improve the existing information supply about childhood vaccinations. Methods

Dutch parents with one or more children aged 0-4 years received an online questionnaire (N = 4000) measuring psychosocial determinants of information-seeking behaviour and self-reports of types and sources of vaccine information searched for (response rate 14.8%). We also tested two invitation approaches (i.e., reply card versus Internet link in invitation letter) to observe the difference in response rate.

Results

Almost half of the parents (45.8%) searched for extra information. Of all the respondents, 13% indicated they had missed some information, particularly about side effects of vaccines (25%). Intention to search for vaccination information was influenced by positive attitude and perceived social norm towards information-seeking behaviour. There was no difference in the response rate between the two invitation approaches.

Conclusions

The information provided by the National Immunization Programme (NIP) might be sufficient for most parents. However, some parents mentioned that they did not receive enough information about side effects of vaccinations, which was also the topic most searched for by parents. Public Health Institutes (PHIs) and child healthcare workers should therefore be aware of the importance to mention this aspect in their communication (materials) towards parents. The PHIs must ensure that their website is easy to find with different search strategies. Since the child healthcare worker is perceived as the most reliable information source, they should be aware of their role in educating parents about the NIP.

Why parents refuse childhood vaccination: a qualitative study using online focus groups

Irene A Harmsen, Liesbeth Mollema, Robert AC Ruiter, Theo GW Paulussen, Hester E de Melker, Gerjo Kok

BMC Public Health 2013, 13:1183 (16 December 2013)

Abstract

Background

In high income countries, vaccine-preventable diseases have been greatly reduced through routine vaccination programs. Despite this success, many parents question, and a small proportion even refuse vaccination for their children. As no qualitative studies have explored the factors behind these decisions among Dutch parents, we performed a study using online focus groups.

Methods

In total, eight online focus groups (n = 60) which included Dutch parents with at least one child, aged 0–4 years, for whom they refused all or part of the vaccinations within the National Immunization Program (NIP). A thematic analysis was performed to explore factors that influenced the parents' decisions to refuse vaccination.

Results

Refusal of vaccination was found to reflect multiple factors including family lifestyle; perceptions about the child's body and immune system; perceived risks of disease, vaccine efficacy, and side effects; perceived advantages of experiencing the disease; prior negative experience with vaccination; and social environment. The use of online focus groups proved to be an effective qualitative research method providing meaningful data.

Conclusion

Information provided by the NIP turned out to be insufficient for this group of parents. More trust in the NIP and deliberate decisions might result from increased parental understanding of lifestyle and disease susceptibility, the impact of vaccinations on the immune system, and the relative risks of diseases and their vaccines. The public health institute should also inform parents that the NIP is recommended but non-mandatory.

British Medical Bulletin

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

British Medical Journal

21 December 2013 (Vol 347, Issue 7938) http://www.bmj.com/content/347/7938 [No relevant content]

Bulletin of the World Health Organization

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

Clinical Therapeutics

Vol 35 | No. 12 | December 2013 | Pages 1865-2058 http://www.clinicaltherapeutics.com/current [No relevant content]

Cost Effectiveness and Resource Allocation

(Accessed 21 December 2013)
http://www.resource-allocation.com/
[No new relevant content]

Current Opinion in Infectious Diseases

December 2013 - Volume 26 - Issue 6 pp: v-v,493-588 http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx

Special Theme: ANTIMICROBIAL AGENTS [Reviewed earlier; No specific relevant content]

Developing World Bioethics

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

Development in Practice

Volume 23, Issue 7, 2013 http://www.tandfonline.com/toc/cdip20/current [Reviewed earlier; No relevant content]

Emerging Infectious Diseases

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

The European Journal of Public Health

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

Eurosurveillance

Volume 18, Issue 50, 12 December 2013 http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678 [Reviewed earlier]

Forum for Development Studies

Volume 40, Issue 3, 2013 http://www.tandfonline.com/toc/sfds20/current

[Reviewed earlier; No relevant content]

Globalization and Health

[Accessed 21 December 2013] http://www.globalizationandhealth.com/
[No new relevant content]

Global Health Governance

http://blogs.shu.edu/ghg/category/complete-issues/summer-2013/
[No new relevant content]

Global Health: Science and Practice (GHSP)

November 2013 | Volume 1 | Issue 3 http://www.ghspjournal.org/content/current [Reviewed earlier]

Global Public Health

Volume 8, Issue 10, 2013 http://www.tandfonline.com/toc/rgph20/current#.Uq0DgeKy-F9 [Reviewed earlier]

Health Affairs

December 2013; Volume 32, Issue 12 http://content.healthaffairs.org/content/current
Theme: The Future Of Emergency Medicine: Ch.

Theme: The Future Of Emergency Medicine: Challenges & Opportunities

[Reviewed earlier; No relevant content]

Health and Human Rights

Volume 15, Issue 2 http://www.hhrjournal.org/ [Reviewed earlier]

Health Economics, Policy and Law

Volume 9 - Issue 01 - January 2014 http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue [No relevant content]

Health Policy and Planning

Volume 28 Issue 8 December 2013 http://heapol.oxfordjournals.org/content/current [Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

December 2013 Volume 9, Issue 12

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

[Reviewed earlier]

Infectious Agents and Cancer

http://www.infectagentscancer.com/content

[Accessed 21 December 2013]

Short report

<u>Clustering patterns of human papillomavirus infections among HIV-positive women</u> in Kenva

Salvatore Vaccarella, Hugo De Vuyst, Nelly R Mugo, Samah R Sakr, Martyn Plummer, Daniëlle A Heideman, Silvia Franceschi, Michael Chung Infectious Agents and Cancer 2013, 8:50 (19 December 2013)

Abstract (provisional)

Background

HIV-positive women are at increased risk of human papillomavirus (HPV) infection, and, especially, multiple infections compared to HIV-negative women. Whether certain HPV types have a tendency to cluster in multiple infections beyond or below what would be expected by shared risk factors (e.g., sexual behavior and the degree of immunosuppression) is unclear. We, therefore, investigated clustering patterns of 44 HPV types in HIV-positive women from Kenya. Findings: HPV status was assessed on cervical scrapings from 498 women using GP5+/6+ PCR and reverse line blot. Logistic regression was used to model type-specific HPV positivity, adjusted for age, specific HPV type prevalence, CD4, combination antiretroviral therapy, and, in the Full Model, individual-level random effects that represent unobservable risk factors common to all HPV types. We found a modest excess of women with co-infections with 2 HPV types (1.12; 95% credible intervals: 1.03-1.21) in the Full Model but no significant associations of individual types. No significant deviations of observed/expected counts were observed for any 2-way combination of HPV types at either the chosen level of significance, p = 0.00005, or at p = 0.01. Findings were substantially similar when women with CIN2/3 were excluded and when they were stratified by use of anti-retroviral therapy or CD4 count.

Conclusions

HPV co-infections occurred at random in the cervix of HIV-positive women as previously found in HIV-negative women. The removal of HPV types through vaccination should not result, therefore, in an increase or decrease in the prevalence of HPV types not targeted by vaccination in immunosuppressed women.

Infectious Diseases of Poverty

http://www.idpjournal.com/content [Accessed 21 December 2013]

Chinese social media reaction to the MERS-CoV and avian influenza A(H7N9) outbreaks

Isaac Chun-Hai Fung, King-Wa Fu, Yuchen Ying, Braydon Schaible, Yi Hao, Chung-Hong Chan, Zion Tsz-Ho Tse

Infectious Diseases of Poverty 2013, 2:31 (20 December 2013)

Abstract (provisional)

Background

As internet and social media use have skyrocketed, epidemiologists have begun to use online data such as Google query data and Twitter trends to track the activity levels of influenza and other infectious diseases. In China, Weibo is an extremely popular microblogging site that is equivalent to Twitter. Capitalizing on the wealth of public opinion data contained in posts on Weibo, this study used Weibo as a measure of the Chinese people's reactions to two different outbreaks: the 2012 Middle East Respiratory Syndrome Coronavirus (MERS-CoV) outbreak, and the 2013 outbreak of human infection of avian influenza A(H7N9) in China. Methods

Keyword searches were performed in Weibo data collected by The University of Hong Kong's Weiboscope project. Baseline values were determined for each keyword and reaction values per million posts in the days after outbreak information was released to the public. Results

The results show that the Chinese people reacted significantly to both outbreaks online, where their social media reaction was two orders of magnitude stronger to the H7N9 influenza outbreak that happened in China than the MERS-CoV outbreak that was far away from China. Conclusions

These results demonstrate that social media could be a useful measure of public awareness and reaction to disease outbreak information released by health authorities.

International Journal of Epidemiology

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

International Journal of Infectious Diseases

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

JAMA

December 18, 2013, Vol 310, No. 23 http://jama.jamanetwork.com/issue.aspx [No relevant content]

JAMA Pediatrics

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

[Reviewed earlier]

Journal of Community Health

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

Journal of Health Organization and Management

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

Journal of Infectious Diseases

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

Journal of Global Ethics

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

Journal of Global Infectious Diseases (JGID)

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

Journal of Medical Ethics

January 2014, Volume 40, Issue 1 http://jme.bmj.com/content/current [No relevant content]

Journal of Medical Microbiology

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

Journal of the Pediatric Infectious Diseases Society (JPIDS)

Volume 2 Issue 4 December 2013 http://jpids.oxfordjournals.org/content/current

Editorial Commentary: Vaccine Refusal Among Pediatric Travelers

Saad B. Omer1,21 and Walter A. Orenstein1,2

Excerpt

United States residents make up the second largest group of individuals from any country traveling internationally [1]. Being a "country of immigrants," many US residents have international family ties. One consequence of these ties is relatively frequent international travel by children, and approximately 5 million international trips are taken by US resident children [2].

International travel is epidemiologically relevant from 2 perspectives: first, it exposes US residents to infectious diseases prevalent in other parts of the world; second, it increases the risk of importation of infectious diseases—including vaccine-preventable diseases. Returning unvaccinated travelers are often responsible for outbreaks in the United States for diseases whose endemic transmission has been eliminated [3–6]. Therefore, it is important for US travelers—particularly children—to receive all recommended vaccines before they embark on their trips.

Routine vaccination has been very effective in controlling many infectious diseases in the United States; however, an increase in refusal and hesitancy to receiving routine childhood vaccines has been documented [7]. Likewise, vaccines for travelers—whether routine vaccines administered to those who have missed previous ...

Pre-Travel Health Preparation of Pediatric International Travelers: Analysis From the Global TravEpiNet Consortium

Stefan Hagmann, Regina C. LaRocque, Sowmya R. Rao, Emily S. Jentes, Mark J. Sotir, Gary Brunette, Edward T. Ryan, and for the Global TravEpiNet Consortium J Ped Infect Dis (2013) 2 (4): 327-334 doi:10.1093/jpids/pit023 http://ipids.oxfordjournals.org/content/2/4/327.abstract

Abstract

Background: Children frequently travel internationally. Health-related data on such children are limited. We sought to investigate the demographics, health characteristics, and preventive interventions of outbound US international pediatric travelers.

Methods: We analyzed data from 32 099 travelers presenting for pre-travel healthcare at the Global TravEpiNet (GTEN), a national consortium of 19 travel clinics, from January 1, 2009 to June 6, 2012.

Results: A total of 3332 (10%) of all GTEN travelers were children (<18 years of age). These children traveled mostly for leisure (36%) or to visit friends or relatives (VFR) (36%). Most popular destination regions were Africa (41%), Southeast Asia (16%), Central America (16%), and the Caribbean (16%). Compared with children traveling for leisure, VFR children were more likely to present <14 days before departure for pre-travel consultation (44% vs 28%), intended to travel for 28 days or longer (70% vs 22%), and to travel to Africa (62% vs 32%). Nearly half of the pediatric travelers (46%) received at least 1 routine vaccine, and most (83%) received at least 1 travel-related vaccine. Parents or guardians of one third of the children (30%) refused at least 1 recommended travel-related vaccine. Most pediatric travelers visiting a malaria-endemic country (72%) received a prescription for malaria chemoprophylaxis.

Conclusions: Ten percent of travelers seeking pre-travel healthcare at GTEN sites are children. VFR-travel, pre-travel consultation close to time of departure, and refusal of recommended vaccines may place children at risk for travel-associated illness. Strategies to engage pediatric travelers in timely, pre-travel care and improve acceptance of pre-travel healthcare interventions are needed.

Journal of Pediatrics

Vol 163 | No. 6 | December 2013 | Pages 1537-1798

http://www.jpeds.com/current

[Reviewed earlier; No relevant content]

Journal of Public Health Policy

Volume 34, Issue 4 (November 2013)

http://www.palgrave-journals.com/jphp/journal/v34/n4/index.html

[Reviewed earlier]

Journal of the Royal Society – Interface

February 6, 2014; 11 (91)

http://rsif.royalsocietypublishing.org/content/current

[Reviewed earlier; No relevant content]

Journal of Virology

December 2013, volume 87, issue 23

http://jvi.asm.org/content/current

[Reviewed earlier; No relevant content]

The Lancet

Dec 21, 2013 Volume 382 Number 9910 p2039 - 2114 e48 - 53

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

Bangladesh's health revolution

Fazle Hasan Abed

Preview I

My country, Bangladesh, has seen a health revolution in my lifetime. Maternal mortality has decreased by 75% since 1980,1 infant mortality has more than halved since 1990, and life expectancy has risen to 68·3 years, higher now than in neighbouring India and Pakistan.2 Such rapid changes in health have almost no historical precedent, save perhaps for Japan's breakneck modernisation following the 19th-century Meiji Restoration.3 ...

Health care for poor people in the urban slums of Bangladesh

Kaosar Afsana, Syed Shabab Wahid

<u>Preview</u>

Bangladesh has witnessed substantial success with respect to health, as described in the Lancet Bangladesh Series and elsewhere.1 The daunting challenge now is the health of poor people living in urban areas. Massive and rapid urbanisation is occurring, with rural populations moving to cities in huge numbers, driven by poverty, climate change, and the promise of better economic opportunities.2,3 In the past 40 years the proportion of the population living in urban settings in Bangladesh has increased from 5% to 28%, with roughly 45 million people now living in urban areas.

Series

Bangladesh: Innovation for Universal Health Coverage

Reducing the health effect of natural hazards in Bangladesh

Richard A Cash, Shantana R Halder, Mushtuq Husain, Md Sirajul Islam, Fuad H Mallick, Maria A May, Mahmudur Rahman, M Aminur Rahman

Preview | Summary |

Innovation for universal health coverage in Bangladesh: a call to action

Alayne M Adams, Tanvir Ahmed, Shams El Arifeen, Timothy G Evans, Tanvir Huda, Laura Reichenbach, for The Lancet Bangladesh Team

<u>Preview</u> | <u>Summary</u> |

The Lancet Global Health

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

The Lancet Infectious Diseases

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

Medical Decision Making (MDM)

January 2014; 34 (1) http://mdm.sagepub.com/content/current [Reviewed earlier]

The Milbank Quarterly

A Multidisciplinary Journal of Population Health and Health Policy
December 2013 Volume 91, Issue 4 Pages 659–868
http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue
[No relevant content]

Nature

Volume 504 Number 7480 pp331-476 19 December 2013 http://www.nature.com/nature/current_issue.html

Nature | Outlook

Cancer vaccines: Material breach

Elie Dolgin

Nature Immunology

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

Nature Medicine

December 2013, Volume 19 No 12 pp1547-1673 http://www.nature.com/nm/journal/v19/n12/index.html [Reviewed earlier]

Nature Reviews Immunology

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

New England Journal of Medicine

December 19, 2013 Vol. 369 No. 25

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

Shattuck Lecture

Chronic Infectious Disease and the Future of Health Care Delivery

Paul E. Farmer, M.D., Ph.D.

http://www.nejm.org/doi/full/10.1056/NEJMsa1310472

Excerpt

More than four decades after one U.S. Surgeon General reportedly declared it "time to close the book on infectious diseases," drug-resistant pathogens have diminished the effectiveness of once-potent therapies. In the past three decades, newly described pathogens, including the human immunodeficiency virus (HIV), the severe acute respiratory syndrome (SARS) virus, and the H1N1 influenza virus, have caused pandemics, while old scourges from tuberculosis to cholera have persisted or resurged. Simultaneously, rising life expectancy and rapid social change have led to an increasing burden of chronic diseases for which we have effective therapies but inadequate innovation for delivering them efficiently to the neediest people — the so-called know—do, or delivery, gap.

As compared with discovery science and randomized trials, the 20th-century biomedical paradigm viewed care delivery as scientifically uninteresting — too messy for serious scrutiny, like the observational and qualitative methods that elucidate it. Yet understanding how and why care delivery does or does not happen and how to improve it may now represent medicine's most important task.2

In settings of poverty, the delivery gap can be a gulf, especially in the case of chronic illness. In the rural villages and small towns in Rwanda, Malawi, and Lesotho, where the nongovernmental organization Partners in Health has worked over the past decade, adherence to daily regimens may seem unlikely. But rapid progress can be made toward closing the gap, as we had learned in rural Haiti. Work with local, national, and international partners to develop health systems able to respond to both acute and chronic disease shows that we can, with adequate resources, improve care delivery, sharply reducing morbidity and mortality. I believe that the lessons from 25 years of responding to the acquired immunodeficiency syndrome (AIDS) and other chronic infections have implications for the chronic afflictions now recognized as leading causes of premature death and disability in places rich and poor (a slide show is available with the full text of this article at NEJM.org)...

OMICS: A Journal of Integrative Biology

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

The Pediatric Infectious Disease Journal

December 2013 - Volume 32 - Issue 12 pp: 1303-1404,e426-e477 http://journals.lww.com/pidj/pages/currenttoc.aspx [Reviewed earlier; No relevant content]

Pediatrics

December 2013, VOLUME 132 / ISSUE 6 http://pediatrics.aappublications.org/current.shtml [Reviewed earlier]

Pharmaceutics

Volume 5, Issue 4 (December 2013), Pages 508-651 http://www.mdpi.com/1999-4923/5/3
[No relevant content]

Pharmacoeconomics

Volume 31, Issue 12, December 2013 http://link.springer.com/journal/40273/31/12/page/1 [Reviewed earlier]

PLoS One

[Accessed 21 December 2013] http://www.plosone.org/

An Efficient Immunization Strategy for Community Networks

Kai Gong, Ming Tang, Pak Ming Hui, Hai Feng Zhang, Do Younghae, Ying-Cheng Lai Research Article | published 20 Dec 2013 | PLOS ONE 10.1371/journal.pone.0083489 Abstract

An efficient algorithm that can properly identify the targets to immunize or quarantine for preventing an epidemic in a population without knowing the global structural information is of obvious importance. Typically, a population is characterized by its community structure and the heterogeneity in the weak ties among nodes bridging over communities. We propose and study an effective algorithm that searches for bridge hubs, which are bridge nodes with a larger number of weak ties, as immunizing targets based on the idea of referencing to an expanding friendship circle as a self-avoiding walk proceeds. Applying the algorithm to simulated networks and empirical networks constructed from social network data of five US universities, we show that the algorithm is more effective than other existing local algorithms for a given immunization coverage, with a reduced final epidemic ratio, lower peak prevalence and fewer nodes that need to be visited before identifying the target nodes. The effectiveness stems from

the breaking up of community networks by successful searches on target nodes with more weak ties. The effectiveness remains robust even when errors exist in the structure of the networks.

<u>Community-Based Interventions to Improve HPV Vaccination Coverage among 13-to 15-Year-Old Females: Measures Implemented by Local Governments in Japan</u>
Hiroyuki Fujiwara, Yuji Takei, Yoshiki Ishikawa, Yasushi Saga, Shizuo Machida, Akiyo Taneichi, Mitsuaki Suzuki

Research Article | published 16 Dec 2013 | PLOS ONE 10.1371/journal.pone.0084126 *Abstract*

The purpose of this study was to examine the effect of various community-based interventions in support of HPV vaccination implemented by cities and towns within Tochigi prefecture, Japan with a view to identifying useful indicators which might guide future interventions to improve HPV vaccination coverage in the prefecture. A postal questionnaire survey of all 27 local governments in Tochigi Prefecture was conducted in December 2010. All 27 responded, and 22 provided the exact numbers of the targeted and vaccinated populations of 13- to 15-year-old girls from April to December 2010. The local governments also answered questions on the type of interventions implemented including public subsidies, school-based programs, direct mail, free tickets and recalls. Local governments that conducted a school-based vaccination program reported 96.8% coverage for the 1st dose, 96.2% for the 2nd dose, and 91.2% for the 3rd dose. Those that provided subsidies without school-based programs reported a wide range of vaccination rates: 45.7%-95.0% for the 1st dose, 41.1%-93.7% for the 2nd dose and 3.1%-90.1% for the 3rd dose. Among this group, the combination of a free ticket, direct mail and recall was most effective, with 95.0% coverage for the 1st dose, 93.7% for the 2nd dose, and 90.1% for the 3rd dose. The governments that did not offer a subsidy had the lowest vaccination coverage, with 0.8%-1.4% for the 1st dose, 0.0%-0.8% for the 2nd dose, and 0.1%-0.1% for the 3rd dose. The results of this survey indicate that school-based vaccinations and public subsidies are the most effective method to improve HPV vaccination coverage; however, the combination of a free ticket, direct mail, and recalls with public subsidies are also important measures in increasing the vaccination rate. These data may afford important indicators for the successful implementation of future HPV vaccination programs.

PLoS Medicine

(Accessed 21 December 2013) http://www.plosmedicine.org/
[No new relevant content]

PLoS Neglected Tropical Diseases

November 2013 http://www.plosntds.org/article/browseIssue.action [No new relevant content]

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

(Accessed 21 December 2013) http://www.pnas.org/content/early/recent [No new relevant content]

Pneumonia

Vol 2 (2013)

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

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

[Reviewed earlier]

Public Health Ethics

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

Qualitative Health Research

December 2013; 23 (12) http://qhr.sagepub.com/content/current [Reviewed earlier; No relevant content]

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

October 2013 Vol. 34, No. 4

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

[Reviewed earlier; No relevant content]

Risk Analysis

December 2013 Volume 33, Issue 12 Pages 2079–2224 http://onlinelibrary.wiley.com/doi/10.1111/risa.2013.33.issue-12/issuetoc [Reviewed earlier]

Science

20 December 2013 vol 342, issue 6165, pages 1405-1544 http://www.sciencemag.org/current.dtl

Breakthrough of the Year Cancer Immunotherapy

Jennifer Couzin-Frankel

Science's editors have chosen cancer immunotherapy as Breakthrough of the Year for 2013, a strategy that harnesses the body's immune system to combat tumors. It's an attractive idea,

and researchers have struggled for decades to make it work. Now, many oncologists say those efforts are paying off, as two different techniques show signs of helping some patients. One involves antibodies that release a brake on T cells, giving them the power to tackle tumors. Another involves genetically modifying an individual's T cells outside the body to make them better able to target cancer, and then reinfusing them so they can do just that. Experts stress that these techniques have been tested in only small trials, and they don't always work. But the results have raised hope that immunotherapy may give doctors new options for treatment in the future.

Read the Full Text

2013 Runners-Up

In Vaccine Design, Looks Do Matter

In work that Science ranked as a runner-up for Breakthrough of the Year, researchers used structural biology—the study of the molecules of life—to design the key ingredient of a vaccine against a dangerous childhood disease. Respiratory syncytial virus (RSV) infections hospitalize millions of infants every year. This year, scientists crystallized an antibody the body uses to combat RSV; then they analyzed its structure and used the information to design an immunogen that may lead to a vaccine. Other researchers hope a similar approach will yield new HIV drug

Read the Full Text

Science Translational Medicine

18 December 2013 vol 5, issue 216 http://stm.sciencemag.org/content/current [No relevant content]

Social Science & Medicine

Volume 102, <u>In Progress</u> (February 2014) http://www.sciencedirect.com/science/journal/02779536/102 [No new relevant content]

UN Chronicle

Vol. L No. 4 2013 December 2013 http://unchronicle.un.org/

Theme: Education

This edition of the UN Chronicle looks at the social impact of education as part of the third anniversary of the establishment of the United Nations Academic Impact. The articles, written by leading experts on education, examine issues such as the importance of educating young people about the UN; higher learning institutions and global citizen education; making academic research accessible; international mobility of Brazilian students; and education as the pathway towards gender equality.

Vaccine

Volume 32, Issue 2, Pages 205-310 (3 January 2014) http://www.sciencedirect.com/science/journal/0264410X/32

A reduction in chronic hepatitis B virus infection prevalence among children in Vietnam demonstrates the importance of vaccination

Review Article

Pages 217-222

Tran Hien Nguyen, Minh Huong Vu, Van Cuong Nguyen, Lien Huong Nguyen, Kohei Toda, Tuyet Nga Nguyen, Sang Dao, Kathleen A. Wannemuehler, Karen A. Hennesse Abstract

Background

Vietnam has high endemic hepatitis B virus infection with >8% of adults estimated to have chronic infection. Hepatitis B vaccine was first introduced in the national childhood immunization program in 1997 in high-risk areas, expanded nationwide in 2002, and included birth dose vaccination in 2003. This survey aimed to assess the impact of Vietnam's vaccination programme by estimating the prevalence of hepatitis B surface antigen (HBsAg) among children born during 2000–2008.

Methods

This nationally representative cross-sectional survey sampled children based on a stratified three-stage cluster design. Demographic and vaccination data were collected along with a whole blood specimen that was collected and interpreted in the field with a point-of-care HBsAg test.

Results

A total of 6,949 children were included in the survey analyses. The overall HBsAg prevalence among surveyed children was 2.70% (95% confidence interval (CI): 2.20-3.30). However, HBsAg prevalence was significantly higher among children born in 2000-2003 (3.64%) compared to children born 2007-2008 (1.64%) (prevalence ratio (PR: 2.22, CI 1.55-3.18)). Among all children included in the survey, unadjusted HBsAg prevalence among children with ≥ 3 doses of hepatitis B vaccine including a birth dose (1.75%) was significantly lower than among children with ≥ 3 doses of hepatitis B vaccine but lacked a birth dose (2.98%) (PR: 1.71, CI: 1.00-2.91) and significantly lower than among unvaccinated children (3.47%) (PR: 1.99, CI: 1.15-3.45). Infants receiving hepatitis B vaccine > 7 days after birth had significantly higher HBsAg prevalence (3.20%) than those vaccinated 0-1 day after birth (1.52%) (PR: 2.09, CI: 1.27-3.46).

Conclusion

Childhood chronic HBV infection prevalence has been markedly reduced in Vietnam due to vaccination. Further strengthening of timely birth dose vaccination will be important for reducing chronic HBV infection prevalence of under 5 children to <1%, a national and Western Pacific regional hepatitis B control goal.

System factors to explain 2009 pandemic H1N1 state vaccination rates for children and high-risk adults in US emergency response to pandemic

Original Research Article

Pages 246-251

Carlo Davila-Payan, Julie Swann, Pascale M. Wortley

Abstract

Introduction

During the 2009–2010 H1N1 pandemic, children and high-risk adults had priority for vaccination. Vaccine in short supply was allocated to states pro-rata by population, but vaccination rates as of January 2010 varied among states from 21.3% to 84.7% for children and 10.4% to 47.2% for high-risk adults. States had different campaign processes and decisions.

Objective

To determine program and system factors associated with higher state pandemic vaccination coverage for children and high-risk adults during an emergency response with short supply of vaccine.

Methods

Regression analysis of factors predicting state-specific H1N1 vaccination coverage in children and high-risk adults, including state campaign information, demographics, preventive or health-seeking behavior, preparedness funding, providers, state characteristics, and surveillance data. Results

Our modeling explained variation in state-specific vaccination coverage with an adjusted R-squared of 0.82 for children and 0.78 for high-risk adults. We found that coverage of children was positively associated with programs focusing on school clinics and with a larger proportion of doses administered in public sites; negatively with the proportion of children in the population, and the proportion not visiting a doctor because of cost. The coverage for high-risk adults was positively associated with shipments of vaccine to "general access" locations, including pharmacy and retail, with the percentage of women with a Pap smear within the past 3 years and with past seasonal influenza vaccination. It was negatively associated with the expansion of vaccination to the general public by December 4, 2009. For children and high-risk adults, coverage was positively associated with the maximum number of ship-to-sites and negatively associated with the proportion of medically underserved population. Conclusion

Findings suggest that distribution and system decisions such as vaccination venues and providers targeted can positively impact vaccination rates for children and high-risk adults. Additionally, existing health infrastructure, health-seeking behaviors, and access affected coverage.

Current situation of tuberculosis in Japan and requirement for new vaccine

Pages 304-305 Satoshi Mitarai *No abstract*

Vaccine: Development and Therapy

(Accessed 21 December 2013)

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

[No new relevant content]

Vaccines — Open Access Journal

(Accessed 21 December 2013)

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

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

[No new relevant content]

Value in Health

Vol 16 | No. 8 | December 2013 | Pages 1111-1174

http://www.valueinhealthjournal.com/current

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

School Nurses' Role as Opinion Leaders Regarding the HPV Vaccine for Youth Rosen, Brittany Leigh

Doctoral dissertation, Texas A & M University. Available electronically from http://hdl.handle.net/1969.1/151111.

Abstract

The most common sexually transmitted infection for both males and females is the human papillomavirus (HPV). HPV is responsible for nearly all cervical cancers. Currently, an HPV vaccine is available; however, HPV vaccination rates for US adolescents are dismal. School nurses serve as the person connecting medical and school communities, and are a critical component in assisting families traverse the medical and educational systems. Thus, there is reason to assume school nurses can be key opinion leaders regarding the HPV vaccine. The purpose of this study was to: (1) explain how the Diffusion of Innovations (DOI) theory explains school nurses' roles as opinion leaders regarding the HPV vaccine; (2) document current literature regarding healthcare providers' perspectives and practice regarding the HPV vaccine; and (3) evaluate school nurses' knowledge, attitudes, perceptions of being an opinion leader and professional practice regarding the HPV vaccine for youth. DOI states opinion leaders influence the rate of an innovation (e.g., the HPV vaccine). We argue school nurses are opinion leaders for the HPV vaccine because of their unique leadership position through their crossdisciplinary understanding of the educational and health systems. The systematic literature review included 28 studies of healthcare providers. The main barrier, vaccine cost, was identified in 12 reports. Additionally, females and older adolescents were more frequently vaccinated than males and younger adolescents. To examine school nurses' knowledge, attitudes, perceptions and professional practice regarding the HPV vaccine, the study included a sample of 413 school nurses. Structural equation modeling revealed knowledge influenced attitudes, attitudes affected perceptions and professional practices, and perceptions predicted professional practice. Furthermore, the perceptions variable was found to be a partial mediator in the model. Practitioners designing programs to engage school nurses in disseminating HPV vaccine education may benefit from questioning whether their programs might be emphasizing non-crucial elements for influencing vaccine dissemination practice (e.g., knowledge) and deemphasizing influential elements such as attitudes and perceptions.

Special Focus Newsletters

Dengue Vaccine Initiative: Newsletter – December 2013

http://us2.campaign-

archive2.com/?u=3805c2f42ef8400c2e9729b91&id=d19a996957&e=6898e601e9

PATH –RotaFlash – December 16, 2013

http://vad.createsend5.com/t/ViewEmail/r/F6E8B1F28B9C2F4C2540EF23F30FEDED/E38B11B8894CC5F5DBC23BD704D2542D

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 21 December 2013

Pakistan's polio workers targeted for killing

Thirty-one people have been killed in attacks on health workers since July 2012.

Arsla Jawaid Last updated: 17 Dec 2013 10:01

http://www.aljazeera.com/indepth/features/2013/12/pakistan-polio-workers-targeted-killing-

201312118364851379.html

The Atlantic

http://www.theatlantic.com/magazine/ Accessed 21 December 2013 [No new, unique, relevant content]

BBC

http://www.bbc.co.uk/ Accessed 21 December 2013 [No new, unique, relevant content]

Brookings

http://www.brookings.edu/ Accessed 21 December 2013 Opinion | December 2013

The Equity of Universal Health Coverage: Some Reflections from Singapore

Bv: Calvin Wai Loon Ho

http://www.brookings.edu/research/opinions/2013/12/09-singapore-universal-health-coverage-ho

Excerpt

The challenges confronting health systems in Asia include known and emerging infectious diseases and an increasing prevalence of non-communicable diseases. For a number of countries, such as Singapore, a rapidly aging population is expected to exacerbate the latter. In 2005, member states of the World Health Organization (WHO) from East Asia and elsewhere made a commitment to develop their health financing systems in ways that will ensure that all people have access to health services and do not suffer financial hardship in paying for

them.[1] By this initiative, how successfully health systems meet the challenges ahead will depend on the extent that equity in access and equity in financing are achieved. Equity is difficult to define simply, but it is regarded as a cornerstone not only of policy decisions, but also of ethically legitimate social institutions.[2] Broadly speaking, equity is concerned with maximizing the benefits, capabilities and general well-being of the worst off members of a society. In the context of universal health care (UHC), equity in access could be understood as necessitating the prioritization of those who with the greatest health needs in order to secure for them equality of opportunity or capability to the furthest extent possible. At the same time, health systems must ensure that households are not made to contribute more than their ability to pay in order for equity in financing to be also secured...

Council on Foreign Relations

http://www.cfr.org/ Accessed 21 December 2013 [No new, unique, relevant content]

Economist

http://www.economist.com/ Accessed 21 December 2013 [No new, unique, relevant content]

Financial Times

http://www.ft.com Accessed 21 December 2013 [No new, unique, relevant content]

Forbes

http://www.forbes.com/ Accessed 21 December 2013 Op/Ed 12/16/2013 @ 6:00AM

Meningitis Outbreaks Call For FDA Leadership. Don't Hold Your Breath.

Henry I. Miller

http://www.forbes.com/sites/henrymiller/2013/12/16/meningitis-outbreaks-call-for-fda-leadership-dont-hold-your-breath/

Excerpt

Vaccination is one of the most important advances in public health in recent centuries, and hundreds of vaccines have all but eradicated many of the infectious disease scourges of the past. But two recent college campus outbreaks of Meningitis B (MenB), which is caused by serotype B of a bacterium called Neisseria meningitidis, or meningococcus, show that more needs to be done. What we need right now is not scientific or technological ingenuity, but more enlightened and responsive government oversight...

Foreign Affairs

http://www.foreignaffairs.com/ Accessed 21 December 2013 [No new, unique, relevant content]

Foreign Policy

http://www.foreignpolicy.com/

Accessed 21 December 2013

[No new, unique, relevant content]

The Guardian

http://www.guardiannews.com/

Accessed 21 December 2013

[No new, unique, relevant content]

The Huffington Post

http://www.huffingtonpost.com/

Accessed 21 December 2013

[No new, unique, relevant content]

Le Monde

http://www.lemonde.fr/

Accessed 21 December 2013

[No new, unique, relevant content]

New Yorker

http://www.newyorker.com/

Accessed 21 December 2013

[No new, unique, relevant content]

New York Times

http://www.nytimes.com/

Accessed 21 December 2013

Michiaki Takahashi, 85, Who Tamed Chickenpox, Dies

By WILLIAM YARDLEY

Published: December 21, 2013

http://www.nytimes.com/2013/12/22/health/michiaki-takahashi-85-who-tamed-chickenpox-

dies.html?_r=0

Excerpt

Dr. Michiaki Takahashi, whose experience caring for his 3-year-old son after the boy contracted chickenpox led him to develop a vaccine for the virus that is now used all over the world, died on Monday in Osaka, Japan. He was 85...

Reuters

http://www.reuters.com/

Accessed 21 December 2013

[No new, unique, relevant content]

Wall Street Journal

http://online.wsj.com/home-page

Accessed 21 December 2013

December 20, 2013, 3:08 a.m. ET

NY health commissioner imposes flu precautions

Associated Press

ALBANY, N.Y. — New York State Health Commissioner Dr. Nirav Shah has declared the flu now prevalent in the state, requiring hospitals and other state-regulated health facilities to ensure their personnel have either had this season's influenza vaccine or else wear masks where patients may be present.

The rule includes more than 4,000 hospitals, clinics, diagnostic centers, nursing homes, hospices and home care agencies statewide. It applies to doctors, nurses, students, volunteers, contractors and even some cafeteria workers.

Shah says it's not too late for vaccinations and notes confirmed cases in more than 45 counties and all five of New York City's boroughs.

The state recorded 45,352 confirmed cases and 9,537 patients hospitalized with influenza last season. It was considered widespread for 22 weeks and cited in 14 pediatric deaths.

Washington Post

http://www.washingtonpost.com/

Accessed 21 December 2013

Gunmen kill anti-polio worker in NW Pakistan

By Associated Press, Updated: Saturday, December 21, 6:20 AM

http://www.washingtonpost.com/world/asia_pacific/gunmen-kill-anti-polio-worker-in-nw-pakistan/2013/12/21/d8685caa-6a31-11e3-997b-9213b17dac97_story.html

PESHAWAR, Pakistan — A government official says gunmen have attacked an anti-polio vaccination center in a tribal region in northwestern Pakistan, killing a medic on duty.

The official, Iqbal Khan, says Saturday's attack took place in the Ghundi village of the Khyber tribal region. The slain medical technician was identified as Ghilaf Khan.

The health center is run by the party of cricketer-turned-politician Imran Khan and has been known for its vaccination drives.

Imran Khan last week launched the latest anti-polio campaign. His party later reported receiving threats from Taliban militants.

Islamic militants oppose vaccination against polio and consider such campaigns a cover for spying. They have attacked and killed several anti-polio campaign workers in recent months across Pakistan.

Pakistan is one of only three countries where the polio virus is still endemic.

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