Center for Vaccine Ethics and Policy
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Vaccines: The Week in Review
2 February 2013
Center for Vaccine Ethics & Policy (CVEP)

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

Comments and suggestions should be directed to
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Editor's Notes:
- A pdf version of this issue is available on our blog: http://centerforvaccineethicsandpolicy.wordpress.com/

UNICEF said that over 1 million children vaccinated against measles in the past week through in a joint immunization campaign by the Ministry of Public Health, WHO, UNICEF and its partner Merlin in eastern Democratic Republic of Congo (DR Congo). Preliminary results show that 96% of the targeted 1,180,000 million children aged between 6 months and 15 years of age were vaccinated in the seven health zones of North Kivu province during the five-day vaccination campaign. Barbara Bentein, UNICEF Representative in the DRC, said, "So far, children from North Kivu have survived fighting, displacement and hunger. Now they are at risk of dying from measles, an entirely preventable disease. An outbreak of measles can spread like a bushfire, and displaced children are especially vulnerable. We must ensure that all children aged between 6 months and 15 years are vaccinated."
More at: http://www.unicef.org/media/media_67678.html

WHO recommends rotavirus vaccines in all national immunization programmes
Excerpt
"1 February 2013 - In an updated position paper, published in the *Weekly Epidemiological Record* , WHO recommends the use of rotavirus vaccines in all national immunization programmes, particularly in south and south-eastern Asia and sub-Saharan Africa.
"The use of rotavirus vaccines should be part of a comprehensive strategy to control diarrhoeal diseases with the scaling up of both prevention — including promotion of early and

exclusive breastfeeding, hand washing, improved water supply and sanitation — and treatment packages…."

"…Plans for introduction of rotavirus vaccines should consider the epidemiology of the disease by age, the coverage and actual age at vaccination, and an evaluation of the estimated public health impact and potential risks (e.g. intussusception). In addition, cost-effectiveness assessment, issues of affordability of the vaccine, financial and operational impact on the immunization delivery system, and careful examination of current immunization practices should be taken into account.

"Introduction of rotavirus vaccine should be accompanied by measures to ensure high vaccination coverage and timely administration of each dose…"
http://www.who.int/immunization/newsroom/newsstory_rotavirus_vaccines_immunization_programmes/en/index.html

The **Weekly Epidemiological Record (WER) for 1 February 2013**, vol. 88, 5 (pp. 49–64) includes:
- Rotavirus vaccines: WHO position paper – January 2013
http://www.who.int/entity/wer/2013/wer8804.pdf

WHO: Executive Board appoints new Regional Director for the Americas

The WHO Executive Board, currently holding its 132nd session in Geneva, has appointed Dr Carissa Etienne as the new Regional Director for WHO's Americas Region (WHO/AMR), following her nomination by the Regional Committee for the Americas in September 2012. Dr Etienne will take up her appointment for a five-year term on 1 February 2013, succeeding Dr Mirta Roses Periago of Argentina. Dr Etienne, in her acceptance speech, said, "I believe strongly that good health is rooted in equity, universality, solidarity and inclusiveness. I have learned that Universal Health Coverage is not only the best way to improve the health of every citizen in a country – but that it is entirely feasible." Dr Etienne, from Dominica, holds degrees in medicine and surgery from the University of the West Indies, as well as a master's in community health and an honorary diploma in public health from the London School of Hygiene and Tropical Medicine.
http://www.who.int/mediacentre/news/notes/2013/regional_director_20130122/en/index.html

WHO Europe: Experts meet to discuss verification process for measles and rubella elimination *– Countries are committed to eradicating measles and rubella in the WHO European Region by 2015.*

Based on a recommendation from the Regional Verification Commission for Measles and Rubella Elimination (RVC), which evaluates progress towards the goal, Member States are setting up national verification committees (NVCs) to oversee the process at country level, and report their findings to the RVC. So far, 16 countries have established NVCs. WHO/Europe encourages all Member States to do so as soon as possible, and expects the NVCs to submit their first annual status reports to the RVC before the end of July 2013.

Members of the RVC and some NVCs, measles focal points in countries and virologists from 16 northern and western European Member States gathered in Copenhagen, Denmark on 29–

30 January 2013 at a meeting jointly organized by WHO/Europe and the European Centre for Disease Prevention and Control (ECDC). The purpose of the meeting was to inform national experts about the process of documenting measles and rubella elimination, and to enable participants to share information on the situation at the national and regional levels and discuss action to increase vaccination coverage through routine and/or supplemental immunization activities.

Progress towards elimination

In 2012, 11 countries in the Region experienced measles outbreaks. From January to October 2012, over 20,000 cases of measles were reported in 51 countries in the WHO European Region, although 87% were reported in only 4 countries. Most cases were in young people aged 5–19 years:

<1 year: 10%
1–4 years: 23%
5–19 years: 39%
≥20 years: 28%.

Rubella showed a similar pattern in the first 10 months of 2012: over 28 000 cases were reported by 43 countries, with 99% of cases concentrated in 4 countries.

During the WHO/ECDC meeting, experts discussed how to increase vaccination coverage through routine and/or supplemental immunization.

More at: http://www.euro.who.int/en/what-we-do/health-topics/communicable-diseases/measles-and-rubella/news/news/2013/02/experts-meet-to-discuss-verification-process-for-measles-and-rubella-elimination

GSK and Biological E Limited announced an agreement to form a 50/50 joint venture for the early stage research and development of a six-in-one combination paediatric vaccine "to help protect children in India and other developing countries from polio and other infectious diseases." The partnership "reinforces the commitment of both companies to support the World Health Organisation's (WHO) global polio eradication programme." The companies said that, if approved, the vaccine, which would combine GSK's injectable polio vaccine (IPV) and Biological E's pentavalent vaccine for diphtheria, tetanus, whooping cough (whole cell pertussis), hepatitis B, and Haemophilus influenzae type b, "could be the first of its kind." The fully liquid formulation of the vaccine "means it would be ready to use with no additional ingredients or materials required, freeing up space at local storage facilities." The JV will bear the development costs for the candidate vaccine, which is expected to enter phase 1 development in the next two years. A small initial cash investment will be made by both companies to cover start-up costs for the JV and subsequent development costs will be split equally.

http://www.gsk.com/media/press-releases/2013/GSK-and-Biological-E-announce-joint-venture.html

The **MMWR for February 1, 2013** / Vol. 62 / No. 4 includes:

- Noninfluenza Vaccination Coverage Among Adults — United States, 2011

- QuickStats: Percentage of Adults Aged ≥65 Years Who Had Ever Received a Pneumococcal Vaccination, by Selected Race/Ethnicity — National Health Interview Survey, United States, 2000–2011

Noninfluenza Vaccination Coverage Among Adults — United States, 2011
MMWR - February 1, 2013 / 62(04);66-72
On January 29, 2013, this report was posted as an MMWR Early Release on the MMWR website (http://www.cdc.gov/mmwr).
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6204a2.htm?s_cid=mm6204a2_w
[Editor's Excerpt]

Vaccinations are recommended throughout life to prevent vaccine-preventable diseases and their sequelae. Adult vaccination coverage, however, remains low for most routinely recommended vaccines (1) and well below Healthy People 2020 targets.* In October 2012, the Advisory Committee on Immunization Practices (ACIP) approved the adult immunization schedule for 2013 (2). Apart from influenza vaccination, which is now recommended for all adults, other vaccines recommended for adults target different populations based on age, certain medical conditions, behavioral risk factors (e.g., injection drug use), occupation, travel, and other indications (2). To assess adult (aged ≥19 years) vaccination coverage for select vaccines, CDC analyzed data from the 2011 National Health Interview Survey (NHIS). This report summarizes the results of that analysis for pneumococcal vaccine, tetanus toxoid–containing vaccines (including tetanus and diphtheria toxoid [Td] with acellular pertussis vaccine [Tdap]), and hepatitis A, hepatitis B, herpes zoster (shingles), and human papillomavirus (HPV) vaccines, by selected characteristics (age, race/ethnicity,† and vaccination target criteria). Influenza vaccination coverage estimates for the 2011–12 influenza season have been published separately (3). Compared with 2010 (1), the data indicate modest increases in Tdap vaccination among persons aged 19–64 years and HPV vaccination among women, but only little improvement in coverage for the other vaccines among adults in the United States. Coverage for tetanus vaccination (with any tetanus toxoid–containing vaccine) during the past 10 years was unchanged. **Substantial increases in vaccination coverage are needed to reduce the occurrence of vaccine-preventable diseases among adults.** The Community Preventive Services Task Force and other authorities have recommended that health-care providers incorporate vaccination needs assessment, recommendation, and offer of vaccination into routine clinical practice for adult patients (4,5)…

Update: Polio this week *- As of 30 January 2013*
Global Polio Eradication Initiative
http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx
[Editor's Extract and bolded text]
- The WHO Executive Board (EB) met last week in Geneva, Switzerland. There was strong recognition among Member States of the progress achieved with the 'emergency approach' instituted since May, and real confidence in the ultimate feasibility of polio eradication in the near term. Consequently, there was strong endorsement of the vision, objectives, major activities and timelines for the new Polio Eradication and Endgame Strategic Plan 2013-2018…
No new cases of either WPV or circulating vaccine-derived poliovirus type 2 (cVDPV2) were reported in the past week.

WHO - Global Alert and Response (GAR)
Disease Outbreak News - Most recent news items
1 February 2013
Avian influenza – situation in Cambodia – update
Excerpt
1 February 2013 - The Ministry of Health (MoH) of the Kingdom of Cambodia reported five new human cases of avian influenza that were confirmed positive for the H5N1 virus in January 2013…The cases all presented with fever, cough and other ILI symptoms. Four of the cases died, with 1 case, the 8 month old male, recovering after only experiencing mild ILI. Laboratory samples were tested by the National Institute of Public Health's laboratory and by the Institut Pasteur du Cambodge. Preliminary evidence does not support human-to-human transmission and four of the cases are known to have had close contact with sick/dead poultry…

WHO - Humanitarian Health Action
No new reports
http://www.who.int/hac/en/index.html

WHO: Global Immunization News, December 2012 includes:
News
☐Djibouti celebrates Introduction of Pneumococcal vaccine in the National Immunization programme
☐Growing Consensus on Strengthening National Vaccine Delivery Systems
☐Timor-Leste launches introduction of new vaccine as part of intensification of routine immunization
☐Review of National Immunization Programme in Tajikistan, 19-28 November 2012
☐Eastern Mediterranean is the first WHO region launching Vaccine Safety E-learning course CD
☐New technology for producing thermostable INFLUENZA vaccines
Meetings/Workshops
☐The 2nd Hands-on Training Course to Implement Real-time Polymerase Chain Reaction (PCR) Technique for Rapid Detection and Characterization of Polioviruses in the Western Pacific Region
☐18th Meeting of the Regional Commission for the Certification of Poliomyelitis Eradication in the Western Pacific Region
☐First meeting on seasonal influenza vaccines in Western Pacific Region
☐IPV recommended for countries to mitigate risks and consequences associated with OPV2 withdrawal
☐Global Invasive Bacterial Vaccine Preventable Diseases Surveillance Meeting
☐SOUTH EAST ASIA countries share experiences on intensification of routine immunization at GAVI Partners' Forum
☐National Polio Committees develop action plans for 2013 in Ouagadougou, Burkina Faso
☐Immunizations Systems and Technologies for Tomorrow
http://www.who.int/entity/immunization/GIN_December_2012.pdf

Conferences/Reports/Research/Analysis/Book Watch

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

Meeting: 132nd WHO Executive Board
21–29 January 2013
Geneva, Switzerland
Provisional agenda
All documentation for the session

WHO: Informal Consultation on Dual-Use Research of Concern (DURC)
26-28 February 2013
Geneva, Switzerland
WHO is convening an informal consultation on the broader issues regarding Dual-Use Research of Concern (DURC). The objective of this meeting is to share perspectives on key issues and concerns related to DURC, identify existing approaches and safeguards for managing DURC, consider critical gaps and actions to initiate. Stakeholders from public health, science, research policy, security, ethics, communications, and international agencies have been invited to participate. Following this consultation a report will be published on the WHO website.
http://www.who.int/mediacentre/events/meetings/2013/durc/en/index.html

Journal Watch

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

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

American Journal of Public Health
Volume 103, Issue 2 (February 2013)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

Annals of Internal Medicine
15 January 2013, Vol. 158. No. 2
http://www.annals.org/content/current
[Reviewed earlier; No relevant content]

BMC Public Health
(Accessed 2 February 2013)
http://www.biomedcentral.com/bmcpublichealth/content
Research article
How has the flu virus infected the Web? 2010 influenza and vaccine information available on the Internet
Loredana Covolo, Silvia Mascaretti, Anna Caruana, Grazia Orizio, Luigi Caimi, Umberto Gelatti
BMC Public Health 2013, 13:83 (29 January 2013)
Abstract (provisional)
Background
The 2009--10 influenza pandemic was a major public health concern. Vaccination was recommended by the health authorities, but compliance was not optimal and perception of the presumed associated risks was high among the public.
The Internet is increasingly being used as a source of health information and advice.
The aim of the study was to investigate the characteristics of websites providing information about flu vaccine and the quality of the information provided.
Methods
Website selection was performed in autumn 2010 by entering eight keywords in two of the most commonly used search engines (Google.com and Yahoo.com).
The first three result pages were analysed for each search, giving a total of 480 occurrences. Page rank was evaluated to assess visibility.
Websites based on Web 2.0 philosophy, websites merely displaying popular news/articles and single files were excluded from the subsequent analysis. We analysed the selected websites (using WHO criteria) as well as the information provided, using a codebook for pro/neutral websites and a qualitative approach for the adverse ones.
Results
Of the 89 websites selected, 54 dealt with seasonal vaccination, three with anti-H1N1 vaccination and 32 with both.
Rank analysis showed that only classic websites (ones not falling in any other category) and one social network were provided on the first pages by Yahoo; 21 classic websites, six displaying popular news/articles and one blog by Google.
Analysis of the selected websites revealed that the majority of them (88.8%) had a positive/neutral attitude to flu vaccination. Pro/neutral websites distinguished themselves from the adverse ones by some revealing features like greater transparency, credibility and privacy protection.
Conclusions
We found that the majority of the websites providing information on flu vaccination were pro/neutral and gave sufficient information. We suggest that antivaccinationist information may have been spread by a different route, such as via Web 2.0 tools, which may be more prone to the dissemination of "viral" information.
The page ranking analysis revealed the crucial role of search engines regarding access to information on the Internet.

British Medical Bulletin
Volume 104 Issue 1 December 2012

http://bmb.oxfordjournals.org/content/current
[Reviewed earlier; No relevant content]

British Medical Journal
02 February 2013 (Vol 346, Issue 7893)
http://www.bmj.com/content/346/7893
Editorial
Preparing for the next pandemic
Greater cross sector collaboration between health, veterinary, wildlife and environmental experts is needed
BMJ 2013; 346 doi: http://dx.doi.org/10.1136/bmj.f364 (Published 23 January 2013)
Cite this as: BMJ 2013;346:f364
Nigel Lightfoot, executive director1, Mark Rweyemamu, professor, transboundary and emerging infectious diseases2, David L Heymann, head and senior fellow3

There is mounting concern about the rate at which newly identified infectious agents are being detected as they cross the species barrier from animals to humans, causing human illness and death.1. Any of these agents, including new influenza viruses, have the potential to spread rapidly, such is the speed and extent of air travel.2

Seventy per cent of emerging infectious diseases are zoonoses.3 The discovery of a new Lassa fever-like virus—the highly lethal lujovirus4—and a new rhabdovirus with a reservoir in bats potentially adds to the burden of haemorrhagic fever outbreaks caused by Marburg and Ebola viruses. There have been 107 cases of infection with these last two viruses, and 55 deaths, in Uganda and the Democratic Republic of the Congo.5

There is also concern about the recent, sudden, and unheralded appearance of a new severe acute respiratory syndrome (SARS)-like virus—the "novel coronavirus"—in Saudi Arabia, Qatar, and Jordan. Nine laboratory confirmed human infections have been reported to the World Health Organization, five of which have resulted in death.6 The source of infection is not known. However, early research suggests that this virus might have the potential to infect several different animals, including bats and pigs.7 The virus may already be widespread in animals. Person to person transmission has not been ruled out for close contacts in the outbreak in Jordan, and it is difficult to determine the virus's epidemic potential.

The 2009 H1N1 influenza pandemic virus spread from pigs and became transmissible between humans some time in early 2009 where experts least expected it. One month before the first infections were detected in the southern United States, the Mexican media were reporting unexpected severe cases of respiratory disease at the end of the flu season. However, the attention of flu planning experts was focused on avian influenza in the Far East. This year new variants of influenza viruses transmitted from pigs to humans in the US, especially at agricultural fairs, have resulted in more than 300 human infections with a new variant influenza A virus, H3N2v.8 Onward human to human transmission has not been reported, but vigilance is needed because pig farming is a global food industry.

Intensive farming practices, environmental degradation, and processes related to the mining industry could all increase opportunities for infectious agents to breech the species barrier; some of these infections may have epidemic or pandemic potential in humans. Responding effectively and efficiently to these cross species infections and all other emerging infections is a challenge for the international public health community, the Food and Agriculture Organization, the World Organization for Animal Health, and WHO.

Current surveillance and response systems in many countries are often compartmentalised, and in poorer countries they may be poorly resourced. Better generic disease surveillance may be achieved through the joining up of "vertical" single disease networks that would share molecular technologies for the fingerprinting of infectious agents. An example of joined up surveillance in the United Kingdom through the Human Animal Infections and Risk Surveillance (HAIRS) group has shown how veterinary and human medicine can effectively work together on risk assessment.9

The concept of "one health" has become a central idea in both veterinary science and public health,10 and a global initiative was launched in 2004. The aim is to highlight the links between animal diseases and public health and to champion a multidisciplinary approach to tackle emerging infectious diseases.11 The initiative has been driven by international health, veterinary, wild life, and environmental experts and supported by WHO, the World Organization for Animal Health, and the Food and Agriculture Organization.

Effective surveillance and a rapid response to an emerging epidemic or pandemic depend on good observation at local level and early communication of potential events to those who can assess and support the management of the risk. "One health" practitioners in the field need to be trained, equipped with diagnostic tests, and provided with rapid communication tools. Weak surveillance networks need to be strengthened. In the past few years new networks have been established in Africa, the Middle East, the Far East, and southeastern Europe.

These networks work across borders, sectors, and national boundaries to collaborate on mounting an early response in the event of an infection threat. They have come together in a new non-governmental organisation, Connecting Organizations for Regional Disease Surveillance (CORDS).12 This organisation is funded by the Rockefeller, Skoll, and Bill & Melinda Gates Foundations, which hope to improve the capacity of these networks and to develop the culture of early communication and problem sharing globally.

If in the short term we are unable to prevent the next pandemic, we will still gain by being better prepared, whatever the threat is. Good response plans will have a chance of working only if surveillance and risk assessment are joined up across sectors and a culture of early communication of potential problems is entrenched.

Next week experts in human and animal public health, international global health bodies, and policy makers from a wide range of disciplines will meet to discuss cross sector responses to infectious disease and further debate on the "one health" initiative at the 2013 Prince Mahidol Conference in Bangkok, Thailand (www.pmaconference.mahidol.ac.th/).
http://www.bmj.com/content/346/bmj.f364

Bulletin of the World Health Organization
Volume 91, Number 2, February 2013, 81-156
http://www.who.int/bulletin/volumes/91/2/en/index.html
Special Issue on Opioids.

Cost Effectiveness and Resource Allocation
(Accessed 2 February 2013)
http://www.resource-allocation.com/
[No new relevant content]

Emerging Infectious Diseases
Volume 19, Number 2—February 2013
http://www.cdc.gov/ncidod/EID/index.htm
[Reviewed earlier]

Eurosurveillance
Volume 18, Issue 5, 31 January 2013
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
In this issue:
Rapid communications from the United Kingdom and Canada with 2012/13 mid-season estimates for influenza vaccine effectiveness and papers on end-of-season estimates for 2011/12

Global Health Governance
Volume VI, Issue 1: Fall 2012
– December 31, 2012
[Reviewed earlier]

Globalization and Health
[Accessed 2 February 2013]
http://www.globalizationandhealth.com/
[No new relevant content]

Health Affairs
January 2013; Volume 32, Issue 1
http://content.healthaffairs.org/content/current
Theme: Transforming The Delivery Of Health Care
[No specific relevant content on vaccines/immunization]

Health and Human Rights
Vol 14, No 2 (2012)
http://hhrjournal.org/index.php/hhr
[Reviewed earlier]

Health Economics, Policy and Law
Volume 8 - Issue 01 - January 2013
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue
Special Section: ACA
[Reviewed earlier]

Health Policy and Planning

Volume 28 Issue 1 January 2013
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
Volume 9, Issue 1 January 2013
http://www.landesbioscience.com/journals/vaccines/toc/volume/9/issue/1/
[Reviewed earlier]

Infectious Diseases of Poverty
2012, 1
http://www.idpjournal.com/content
[Accessed 2 February 2013]
[No new relevant content]

International Journal of Infectious Diseases
January 2013, Vol. 17, No. 1
http://www.ijidonline.com/
[No relevant content]

JAMA
January 23, 2013, Vol 309, No. 4
http://jama.ama-assn.org/current.dtl
[No relevant content]

JAMA Pediatrics
January 2013 Vol 167, No. 1
http://archpedi.jamanetwork.com/issue.aspx?journalid=75&IssueID=926200
[Reviewed earlier]

Journal of Health Organization and Management
Volume 26 issue 6 - Published: 2012
http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest
[Reviewed earlier; No relevant content]

Journal of Infectious Diseases
Volume 207 Issue 4 February 15, 2013
http://www.journals.uchicago.edu/toc/jid/current
[Reviewed earlier; No relevant content]

Journal of Global Infectious Diseases (JGID)
October-December 2012
Volume 4 | Issue 4
Page Nos. 187-224
http://www.jgid.org/currentissue.asp?sabs=n
[Reviewed earlier; No relevant content]

Journal of Medical Ethics
February 2013, Volume 39, Issue 2
http://jme.bmj.com/content/current
[Reviewed earlier; No relevant content]

Journal of Medical Microbiology
February 2013; 62 (Pt 2)
http://jmm.sgmjournals.org/content/current
[Reviewed earlier; No relevant content]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 1 Issue 4 December 2012
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

The Lancet
Feb 02, 2013 Volume 381 Number 9864 p347 – 422 e4 - 5
http://www.thelancet.com/journals/lancet/issue/current
Comment
Prediction of immunisation performance
Celina M Hanson, Eliane Furrer, Nina Schwalbe, Seth Berkley
Preview | Full Text | PDF
Vaccines are extremely powerful disease prevention agents and have the potential to save millions of lives. Tremendous scientific progress has been made in the past decade with several new vaccines licensed, including those to prevent pneumococcal and rotavirus disease—the two leading killers of young children in developing countries. Thanks to concerted efforts by stakeholders through the GAVI Alliance, many of these new vaccines are now accessible to the lowest-income countries and the children who live there.
Public Health
WHO and the future of disease control programmes
Christopher Dye, Thierry Mertens, Gottfried Hirnschall, Winnie Mpanju-Shumbusho, Robert D Newman, Mario C Raviglione, Lorenzo Savioli, Hiroki Nakatani
Summary
Huge increases in funding for international health over the past two decades have led to a proliferation of donors, partnerships, and health organisations. Over the same period, the global burden of non-communicable diseases has increased absolutely and relative to communicable diseases. In this changing landscape, national programmes for the control of HIV/AIDS,

tuberculosis, malaria, and neglected tropical diseases must be reinforced and adapted for three reasons: the global burden of these communicable diseases remains enormous, disease control programmes have an integral and supporting role in developing health systems, and the health benefits of these control programmes go beyond the containment of specific infections. WHO's traditional role in promoting communicable disease control programmes must also adapt to new circumstances. Among a multiplicity of actors, WHO's task is to enhance its normative role as convenor, coordinator, monitor, and standard-setter, fostering greater coherence in global health.

The Lancet Infectious Disease
Feb 2013 Volume 13 Number 2 p97 - 182
http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Medical Decision Making (MDM)
January 2013; 33 (1)
http://mdm.sagepub.com/content/current
Special Issue: Decision Aids and Risk Perception
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
December 2012 Volume 90, Issue 4 Pages 631–807
http://onlinelibrary.wiley.com/doi/10.1111/milq.2012.90.issue-4/issuetoc
[Reviewed earlier]

Nature
Volume 493 Number 7434 pp577-714 31 January 2013
http://www.nature.com/nature/current_issue.html
[No relevant content]

Nature Immunology
February 2013, Volume 14 No 2 pp101-185
http://www.nature.com/ni/journal/v14/n2/index.html
[Reviewed earlier; No relevant content]

Nature Medicine
January 2013, Volume 19 No 1 pp1-112
http://www.nature.com/nm/journal/v19/n1/index.html
[Reviewed earlier]

Nature Reviews Immunology
February 2013 Vol 13 No 2
http://www.nature.com/nri/journal/v13/n2/index.html
[No relevant content]

New England Journal of Medicine
January 31, 2013 Vol. 368 No. 5
http://content.nejm.org/current.shtml
Original Articles
Priming after a Fractional Dose of Inactivated Poliovirus Vaccine
S. Resik and Others
Background
To reduce the costs of maintaining a poliovirus immunization base in low-income areas, we assessed the extent of priming immune responses after the administration of inactivated poliovirus vaccine (IPV).
Methods
We compared the immunogenicity and reactogenicity of a fractional dose of IPV (one fifth of a full dose) administered intradermally with a full dose administered intramuscularly in Cuban infants at the ages of 4 and 8 months. Blood was collected from infants at the ages of 4 months, 8 months, 8 months 7 days, and 8 months 30 days to assess single-dose seroconversion, single-dose priming of immune responses, and two-dose seroconversion. Specimens were tested with a neutralization assay.
Results
A total of 320 infants underwent randomization, and 310 infants (96.9%) fulfilled the study requirements. In the group receiving the first fractional dose of IPV, seroconversion to poliovirus types 1, 2, and 3 occurred in 16.6%, 47.1%, and 14.7% of participants, respectively, as compared with 46.6%, 62.8%, and 32.0% in the group receiving the first full dose of IPV ($P<0.008$ for all comparisons). A priming immune response to poliovirus types 1, 2, and 3 occurred in 90.8%, 94.0%, and 89.6% of participants, respectively, in the group receiving the fractional dose as compared with 97.6%, 98.3%, and 98.1% in the group receiving the full dose ($P=0.01$ for the comparison with type 3). After the administration of the second dose of IPV in the group receiving fractional doses, cumulative two-dose seroconversion to poliovirus types 1, 2, and 3 occurred in 93.6%, 98.1%, and 93.0% of participants, respectively, as compared with 100.0%, 100.0%, and 99.4% in the group receiving the full dose ($P<0.006$ for the comparisons of types 1 and 3). The group receiving intradermal injections had the greatest number of adverse events, most of which were minor in intensity and none of which had serious consequences.
Conclusions
This evaluation shows that vaccinating infants with a single fractional dose of IPV can induce priming and seroconversion in more than 90% of immunized infants. (Funded by the World Health Organization and the Pan American Health Organization; Australian New Zealand Clinical Trials Registry number, ACTRN12610001046099.)
http://www.nejm.org/doi/full/10.1056/NEJMoa1202541

OMICS: A Journal of Integrative Biology
February 2013, 17(2)

http://online.liebertpub.com/toc/omi/17/2
[No relevant content]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
December 2012 Vol. 32, No. 6
http://new.paho.org/journal/index.php?option=com_content&task=view&id=118&Itemid=219
[Reviewed earlier]

The Pediatric Infectious Disease Journal
February 2013 - Volume 32 - Issue 2 pp: A11,99-196,e54-e93
http://journals.lww.com/pidj/pages/currenttoc.aspx
[Reviewed earlier]

Pediatrics
February 2013, VOLUME 131 / ISSUE 2
http://pediatrics.aappublications.org/current.shtml
The Burden of Influenza in Young Children, 2004–2009
Katherine A. Poehling, Kathryn M. Edwards, Marie R. Griffin, Peter G. Szilagyi, Mary A. Staat, Marika K. Iwane, Beverly M. Snively, Cynthia K. Suerken, Caroline B. Hall, Geoffrey A. Weinberg, Sandra S. Chaves, Yuwei Zhu, Monica M. McNeal,
and Carolyn B. Bridges
Pediatrics 2013; 131:207-216
Abstract
OBJECTIVE: To characterize the health care burden of influenza from 2004 through 2009, years when influenza vaccine recommendations were expanded to all children aged ≥6 months.
METHODS: Population-based surveillance for laboratory-confirmed influenza was performed among children aged <5 years presenting with fever and/or acute respiratory illness to inpatient and outpatient settings during 5 influenza seasons in 3 US counties. Enrolled children had nasal/throat swabs tested for influenza by reverse transcriptase-polymerase chain reaction and their medical records reviewed. Rates of influenza hospitalizations per 1000 population and proportions of outpatients (emergency department and clinic) with influenza were computed.
RESULTS: The study population comprised 2970, 2698, and 2920 children from inpatient, emergency department, and clinic settings, respectively. The single-season influenza hospitalization rates were 0.4 to 1.0 per 1000 children aged <5 years and highest for infants <6 months. The proportion of outpatient children with influenza ranged from 10% to 25% annually. Among children hospitalized with influenza, 58% had physician-ordered influenza testing, 35% had discharge diagnoses of influenza, and 2% received antiviral medication. Among outpatients with influenza, 7% were tested for influenza, 7% were diagnosed with influenza, and <1% had antiviral treatment. Throughout the 5 study seasons, <45% of influenza-negative children ≥6 months were fully vaccinated against influenza.
CONCLUSIONS: Despite expanded vaccination recommendations, many children are insufficiently vaccinated, and substantial influenza burden remains. Antiviral use was low. Future studies need to evaluate trends in use of vaccine and antiviral agents and their impact on disease burden and identify strategies to prevent influenza in young infants.

http://pediatrics.aappublications.org/content/131/2/207.abstract

Vaccination Site and Risk of Local Reactions in Children 1 Through 6 Years of Age

Lisa A. Jackson, Do Peterson, Jennifer C. Nelson, S. Michael Marcy, Allison L. Naleway, James D. Nordin, James G. Donahue, Simon J. Hambidge, Carolyn Balsbaugh, Roger Baxter, Tracey Marsh, Lawrence Madziwa, and Eric Weintraub

Pediatrics 2013; 131:283-289

Abstract

OBJECTIVE: Our objective was to assess whether the occurrence of medically attended local reactions to intramuscularly administered vaccines varies by injection site (arm versus thigh) in children 1 to 6 years of age.

METHODS: This is a retrospective cohort study of children in the Vaccine Safety Datalink population from 2002 to 2009. Site of injection and the outcome of medically attended local reactions were identified from administrative data.

RESULTS: The study cohort of 1.4 million children received 6.0 million intramuscular (IM) vaccines during the study period. The primary analyses evaluated the IM vaccines most commonly administered alone, which included inactivated influenza, hepatitis A, and diphtheria-tetanus-acellular pertussis (DTaP) vaccines. For inactivated influenza and hepatitis A vaccines, local reactions were relatively uncommon, and there was no difference in risk of these events with arm versus thigh injections. The rate of local reactions after DTaP vaccines was higher, and vaccination in the arm was associated with a significantly greater risk of this outcome compared with vaccination in the thigh, both for children 12 to 35 months (relative risk: 1.88 [95% confidence interval: 1.34–2.65]) and 3 to 6 years of age (relative risk: 1.41 [95% confidence interval: 0.84–2.34]), although this difference was not statistically significant in the older age group.

CONCLUSIONS: Injection in the thigh is associated with a significantly lower risk of a medically attended local reaction to a DTaP vaccination among children 12 to 35 months of age, supporting current recommendations to administer IM vaccinations in the thigh for children younger than 3 years of age.

http://pediatrics.aappublications.org/content/131/2/283.abstract

Pharmacoeconomics

January 2013 - Volume 31 - Issue 1 pp: 1-91

http://adisonline.com/pharmacoeconomics/pages/currenttoc.aspx

Operationalizing Value-Based Pricing of Medicines

Sussex, Jon; Towse, Adrian; Devlin, Nancy

Abstract

The UK Government is proposing a novel form of price regulation for branded medicines, which it has dubbed 'value-based pricing' (VBP). The specifics of how VBP will work are unclear. We provide an account of the possible means by which VBP of medicines might be operationalized, and a taxonomy to describe and categorize the various approaches. We begin with a brief discussion of the UK Government's proposal for VBP and proceed to define a taxonomy of approaches to VBP. The taxonomy has five main dimensions: (1) what is identified as being of value, (2) how each element is measured, (3) how it is valued, (4) how the different elements of value are aggregated, and (5) how the result is then used to determine the price of a medicine. We take as our starting point that VBP will include a measure of health gain and that, as proposed by the UK Government, this will be built on the QALY. Our principal interest is in the way criteria other than QALYs are taken into account, including severity of illness, the

extent of unmet need, and wider societal considerations such as impacts on carers. We set out to: (1) identify and describe the full range of alternative means by which 'value' might be measured and valued, (2) identify and describe the options available for aggregating the different components of value to establish a maximum price, and (3) note the challenges and relative advantages associated with these approaches. We review the means by which aspects of VBP are currently operationalized in a selection of countries and place these, and proposals for the UK, in the context of our taxonomy. Finally, we give an initial assessment of the challenges, pros and cons of each approach. We conclude that identifying where VBP should lie on each of the five dimensions entails value judgements: there are no simple 'right or wrong' solutions. If a wider definition of value than incremental QALYs gained is adopted, as is desirable, then a pragmatic way to aggregate the different elements of value, including both QALYs and benefits unrelated to QALYs, is to use a multi-criteria decision analysis (MCDA) approach. All approaches to VBP ultimately require the conversion of value, however assessed, into a monetary price. This requires assessment of the marginal values of all types of benefit, not just of QALYs. All stages of the VBP process are subject to uncertainty and margins of error. Consequently, the assessment of overall value can provide bounds to a price negotiation but cannot be expected to identify a precise value-based price.
http://adisonline.com/pharmacoeconomics/Abstract/2013/01000/Operationalizing_Value_Based_Pricing_of_Medicines.1.aspx

PLoS One
[Accessed 2 February 2013]
http://www.plosone.org/
[No new relevant content]

PLoS Medicine
(Accessed 2 February 2013)
http://www.plosmedicine.org/
[No new relevant content]

PLoS Neglected Tropical Diseases
January 2013
http://www.plosntds.org/article/browseIssue.action
[No relevant content]

PNAS - Proceedings of the National Academy of Sciences of the United States of America
(Accessed 2 February 2013)
http://www.pnas.org/content/early/recent
[No new relevant content]

Public Health Ethics
Volume 5 Issue 3 November 2012

http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

Qualitative Health Research
March 2013; 23 (3)
http://qhr.sagepub.com/content/current
[No relevant content]

Trends in Molecular Medicine
Volume 19, Issue 2, Pages 71-134 (February 2013)
http://www.sciencedirect.com/science/journal/14714914
[No relevant content]

Science
1 February 2013 vol 339, issue 6119, pages 481-616
http://www.sciencemag.org/current.dtl
[No relevant content]

Science Translational Medicine
30 January 2013 vol 5, issue 170
http://stm.sciencemag.org/content/current
[No relevant content]

Vaccine
Volume 31, Issue 8, Pages 1135-1254 (6 February 2013)
http://www.sciencedirect.com/science/journal/0264410X
Brief Reports
Parent "cocoon" immunization to prevent pertussis-related hospitalization in infants: The case of Piemonte in Italy
Pages 1135-1137
Michela Meregaglia, Lorenza Ferrara, Alessia Melegaro, Vittorio Demicheli
Abstract
Pertussis incidence in Piemonte (Italy) is now at the lowest level ever reached (0.85 per 100,000 in 2010) but the disease is still endemic in infants (54 per 100,000 in 2005–2010). Parental "cocoon" immunization has been proposed in some countries (i.e. United States, France) as a measure to protect newborns from serious pertussis outcomes. We assessed the number needed to vaccinate (NNV) to prevent hospital admissions in infants (<12 months) and the potential cost-effectiveness of this strategy in Piemonte. The NNV for parental immunization was at least 5000 to prevent one infant hospitalization in the latest epidemic cycle (2005–2010) at the cost of >€100,000. The "cocoon" programme leads to net costs from a National Health Service (NHS) perspective (ROI < 1).

In contexts of low incidence and without reliable data on a high parent-attributable infant risk, the parental "cocoon" programme is poorly efficient and very resource intensive in preventing pertussis in infants.

Completion of the human papillomavirus (HPV) vaccine series among males with private insurance between 2006 and 2009

Pages 1138-1140

Jacqueline M. Hirth, Alai Tan, Gregg S. Wilkinson, Abbey B. Berenson

Abstract

Little is known about initiation and completion among males who received the HPV vaccine on an off-label basis before 2009. This study utilized administrative claims data from a private insurance company to examine completion of the 3 dose HPV series among 514 males who initiated the vaccine between 2006 and May of 2009. Frequencies of HPV vaccination were examined and multivariate logistic regression estimated the odds of completing the entire series within 365 days of initiation. We found that only 21% of male initiators completed all 3 vaccine doses within 12 months and completion decreased over time. Series completion did not vary significantly by provider type. These findings suggest that difficulties may be encountered in fully vaccinating enough males to achieve adequate herd immunity in the future.

Brighton Collaboration paper

The incidence of narcolepsy in Europe: Before, during, and after the influenza A(H1N1)pdm09 pandemic and vaccination campaigns

Original Research Article

Pages 1246-1254

Leonoor Wijnans, Coralie Lecomte, Corinne de Vries, Daniel Weibel, Cormac Sammon, Anders Hviid, Henrik Svanström, Ditte Mølgaard-Nielsen, Harald Heijbel, Lisen Arnheim Dahlström, Jonas Hallgren, Par Sparen, Poul Jennum, Mees Mosseveld, Martijn Schuemie, Nicoline van der Maas, Markku Partinen, Silvana Romio, Francesco Trotta, Carmela Santuccio, et al.

Abstract

Background

In August 2010 reports of a possible association between exposure to AS03 adjuvanted pandemic A(H1N1)pdm09 vaccine and occurrence of narcolepsy in children and adolescents emerged in Sweden and Finland. In response to this signal, the background rates of narcolepsy in Europe were assessed to rapidly provide information for signal verification.

Methods

We used a dynamic retrospective cohort study to assess the narcolepsy diagnosis rates during the period 2000–2010 using large linked automated health care databases in six countries: Denmark, Finland, Italy, the Netherlands, Sweden and the United Kingdom.

Results

Overall, 2608 narcolepsy cases were identified in almost 280 million person years (PY) of follow up. The pooled incidence rate was 0.93 (95% CI: 0. 90–0.97) per 100,000 PY. There were peaks between 15 and 30 year of age (women > men) and around 60 years of age. In the age group 5–19 years olds rates were increased after the start of pandemic vaccination compared to the period before the start of campaigns, with rate ratios (RR) of 1.9 (95% CI: 1.1–3.1) in Denmark, 6.4 (95% CI: 4.2–9.7) in Finland and 7.5 (95% CI: 5.2–10.7) in Sweden. Cases verification in the Netherlands had a significant effect on the pattern of incidence over time.

Conclusions

The results of this incidence study provided useful information for signal verification on a population level. The safety signal of increased narcolepsy diagnoses following the start of the pandemic vaccination campaign as observed in Sweden and Finland could be observed with this

approach. An increase in narcolepsy diagnoses was not observed in other countries, where vaccination coverage was low in the affected age group, or did not follow influenza A(H1N1)pdm09 vaccination. Patient level analyses in these countries are being conducted to verify the signal in more detail.

Vaccine: Development and Therapy
(Accessed 2 February 2013)
http://www.dovepress.com/vaccine-development-and-therapy-journal
[No new relevant content]

Value in Health
Vol 16 | No. 1 | January-February 2013 | Pages 1-228
http://www.valueinhealthjournal.com/current
[Reviewed earlier; No relevant content]

From Google Scholar+: Dissertations, Theses, Selected Journal Articles

A Vaccine against Streptococcus pyogenes: The Potential to Prevent Rheumatic Fever and Rheumatic Heart Disease.
L Guilherme, FM Ferreira, KF Köhler, E Postol, J Kalil - American journal of …, 2013
Streptococcus pyogenes causes severe, invasive infections such as the sequelae associated with acute rheumatic fever, rheumatic heart disease, acute glomerulonephritis, uncomplicated pharyngitis, and pyoderma. Efforts to produce a vaccine against S...

Herd protection by a bivalent-killed-whole-cell oral cholera vaccine in the slums of Kolkata, India
M Ali, D Sur, YA You, S Kanungo, B Sah, B Manna… - Clinical Infectious Diseases, 2013
Background. We evaluated the herd protection conferred by an oral cholera vaccine using two approaches: cluster design and geographic information systems (GIS) design. Methods. Residents living in 3,933 dwellings (clusters) in Kolkata, India were cluster-randomized to ...

Long-term follow-up of human papillomavirus vaccine efficacy
M Lehtinen - Clinical Investigation, 2013
Oncogenic, high-risk human papillomaviruses (HPV) have, in less than four decades, become the showcase of translational science. Harald zur Hausen first suggested the concept of oncogenic high-risk HPV in 1975, before confirming HPV's link to cervical ...

Current status of registry of vaccine clinical trials conducted by Korean investigators in ClinicalTrials. gov, database of US National Institutes of Health
[PDF] J Cho, BB Kim, CW Bae, SH Cha - Clinical and Experimental Vaccine Research, 2013
Purpose: PubMed is not only includes international medical journals but also has a registration site for the ongoing clinical trials, such as ClinicalTrials. gov, under the supervision of US National Institutes of Health. We analyzed current status of vaccine ...

Media Watch

Beginning in June 2012, *Vaccines: The Week in Review* expanded to alert readers to substantive news, analysis and opinion from the general media on vaccines, immunization, global; public health and related themes. *Media Watch* is not intended to be exhaustive, but indicative of themes and issues 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 of 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.

BBC
http://www.bbc.co.uk/
Accessed 2 February 2013
[No new, unique, relevant content]

Economist
http://www.economist.com/
Accessed 2 February 2013
[No new, unique, relevant content]

Financial Times
http://www.ft.com
Accessed 2 February 2013
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 2 February 2013
[No new, unique, relevant content]

Foreign Affairs
http://www.foreignaffairs.com/
January/February 2013 Volume 92, Number 1
Accessed 2 February 2013
[No new unique, relevant content]

Foreign Policy
http://www.foreignpolicy.com/
Accessed 2 February 2013]
[No new unique, relevant content]

The Guardian

http://www.guardiannews.com/
Accessed 2 February 2013
[No new unique, relevant content]

The Huffington Post
http://www.huffingtonpost.com/
Accessed 2 February 2013
[No new unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 2 February 2013
[No new, unique, relevant content]

NPR/National Public Radio [U.S.]
Public Health
Accessed 2 February 2013
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 2 February 2013.

Reuters
http://www.reuters.com/
Accessed 2 February 2013
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page
Accessed 2 February 2013
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 2 February 2013
[No new, unique, relevant content]

Twitter Watch (2 February 2013 – 18:56)
Items of interest from a variety of twitter feeds associated with immunization, vaccines and global public health. This capture is highly selective and is by no means intended to be exhaustive.

WHO @WHO
Life-saving interventions for #cancer incl. cervical cancer screening, vax against hepatitis B & HPV, palliative care for cancer patients

1:27 PM - 2 Feb 13

MSF Canada @MSF_canada
Increase in #measles in eastern Balochistan, #Pakistan http://bit.ly/XYbjEF #MSF medical teams reaching out to identify patients w symptoms
Retweeted by M&R Initiative
10:14 PM - 1 Feb 13

IVAC at JHSPH @IVACtweets
Addressing diarrhea's toll on Africa - 'Achieving Prosperity through Disease Prevention': http://bit.ly/VuroBL #Nigeria #Ghana
12:48 AM - 2 Feb 13

UNICEF @UNICEF
One week. One million children vaccinated against #measles in North Kivu, #DRC. Here's how it happened: http://uni.cf/U9DxB4
1:20 PM - 1 Feb 13

PAHO/WHO @pahowho
Hear from our new Director @CarissaEtienne about her priorities for health in the Americas. http://youtu.be/-i1Zie_XzMY #pahohealth4change
12:24 PM - 1 Feb 13 ·

Gates Foundation @gatesfoundation
"The fight to #endpolio is my top priority." @BillGates on innovative tools bringing this goal closer: http://gates.ly/WjJE4F #BillsLetter
8:23 AM - 1 Feb 13 ·

richard horton @richardhorton1
A stellar group of WHO scientists challenge the agency to strengthen its role in global health. http://bit.ly/14CrxKf .
1:57 AM - 1 Feb 13

M&R Initiative @MeaslesRubella
#DRCongo: >1 million kids #vaccinated against #measles in North Kivu, in joint campaign by MOH, #UNICEF, #WHO & #Merlin.http://uni.cf/YnuOZv
11:28 PM - 31

PATH @PATHtweets
Video: Steve Davis sits down with @edielush of @hubculture to talk about state of #globalhealth in 2013. http://ow.ly/hcjNj #wef #davos
4:15 PM - 28 Jan 13

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Department of Medical Ethics, NYU Medical School; The Wistar Institute Vaccine Center and the Children's Hospital of Philadelphia Vaccine Education Center. Additional support is provided by PATH Vaccine Development Program and the International Vaccine Institute (IVI), and by vaccine industry leaders including GSK, Merck, Pfizer, and sanofi pasteur (list in formation), as well as the Developing Countries Vaccine Manufacturers Network (DCVMN). Support is also provided by a growing list of individuals who use this 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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