Center for Vaccine Ethics and Policy

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Vaccines and Global Health: The Week in Review 14 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 <u>http://centerforvaccineethicsandpolicy.wordpress.com/</u>. This blog allows full-text searching of over 3,500 entries. Comments and suggestions should be directed to

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WHO: World Malaria Report 2013

http://www.who.int/entity/malaria/publications/world_malaria_report_2013/report/en/index.html

Number of pages: 284 Publication date: 2013 Languages: English (summaries in French and Spanish) ISBN: 9 789241 56469 4Media Release Excerpt

11 December 2013 | Geneva/Washington DC - Global efforts to control and eliminate malaria have saved an estimated 3.3 million lives since 2000, reducing malaria mortality rates by 45% globally and by 49% in Africa..

...The large majority of the 3.3 million lives saved between 2000 and 2012 were in the 10 countries with the highest malaria burden, and among children aged less than 5 years – the group most affected by the disease. Over the same period, malaria mortality rates in children in Africa were reduced by an estimated 54%.

...In 2012, there were an estimated 207 million cases of malaria (uncertainty interval: 135 – 287 million), which caused approximately 627 000 malaria deaths (uncertainty interval 473 000 – 789 000). An estimated 3.4 billion people continue to be at risk of malaria, mostly in Africa and south-east Asia. Around 80% of malaria cases occur in Africa.

The "World malaria report 2013" summarizes information received from 102 countries that had on-going malaria transmission during the 2000-2012 period, and other sources, and updates the analyses presented in 2012.

The report contains revised estimates of the number of malaria cases and deaths, which integrate new and updated under-5 mortality estimates produced by the United Nations Inter-

agency Group for Child Mortality Estimation, as well as new data from the Child Health Epidemiology Reference Group.

http://www.who.int/mediacentre/news/releases/2013/world-malaria-report-20131211/en/index.html

From the report:

5.3 New therapies for malaria prevention

5.3.1 Malaria vaccine development

An effective vaccine against malaria has long been envisaged as a valuable addition to the available tools for malaria control. Although research towards the development of malaria vaccines has been pursued since the 1960s, as yet there are no licensed malaria vaccines. However, a number of candidate vaccines are being evaluated in clinical trials, with one candidate vaccine currently being assessed in Phase 3 clinical trials (RTS,S/AS01) (8), and about 20 others in Phase 1 or Phase 2 clinical trials.5

Vaccine candidate RTS,S/AS01

The RTS,S/AS01 vaccine targets P. falciparum. Now in Phase 3 clinical trials, the vaccine is being developed in a partnership between GlaxoSmithKline (GSK) and PATH Malaria Vaccine Initiative (MVI), with MVI receiving funds from the Bill & Melinda Gates Foundation. The vaccine comprises a fusion protein of a malaria antigen – the carboxy terminus of the P. falciparum circumsporozoite (CS) antigen – with hepatitis B surface antigen, and includes a new and potent adjuvant. The manufacturer's clinical development plan for the vaccine focuses on infants and young children living in malaria-endemic African countries.

In October 2013, a third set of results on the efficacy of the RTS,S/AS01 vaccine were reported for 6–14 week and 5–17 month age groups (9). In the 5–17 month age group, efficacy estimates, pooled across all trial sites, remained statistically significant against clinical malaria (46%) and severe malaria (35.5%).

Reductions in both malaria hospitalizations (41.5%) and all-cause hospitalizations (19%) were noted over 18 months. By contrast, at 27% in the 6–14 week age group, the efficacy estimate for severe malaria was not statistically significant (although efficacy against clinical malaria remained statistically significant). In the 5–17 month age group, site-specific efficacy was demonstrated in all 11 settings in seven African countries. The site-specific efficacy estimates over 18 months of follow-up ranged from 40% to 77%, with statistical significance at all sites. By contrast, statistically significant efficacy was confirmed at four of the 11 sites in the younger 6–14 week age group. The reasons for this difference between the age groups are unclear, but co-administration with DTP-containing vaccines and the presence of maternally acquired antibodies to malaria may contribute to a lower immune response in infants aged 6–14 weeks.

The full Phase 3 trial results will become available to WHO in late 2014 and will include 30 months of follow-up safety and efficacy data from groups of children aged 6–14 weeks and 5–17 months, together with data on efficacy and safety of an 18-month booster dose and site-specific efficacy. The WHO Joint Technical Expert Group on Malaria Vaccines (together with the Global Malaria Programme and Department of Immunization, Vaccines and Biologicals), has advised that, in the light of the results published to date, a policy recommendation could be considered once the full trial results become available. The timelines of the Phase 3 trial may allow a WHO review and recommendation in late 2015, as a potential addition to the current WHO-recommended malaria preventive measures. The WHO process for review will also depend on the timings and outcome of the regulatory review that will be performed by the European Medicines Agency in 2014–2015.

Any possible recommendation related to vaccination in the 5–17 month age group would require at least two visits to be added to the routine immunization schedule.

Other malaria vaccine candidates in development

Several other vaccine candidates are currently being explored, but their development is at least 5–10 years behind that of RTS,S/AS01. Details are provided in The Rainbow Tables: WHO's comprehensive spreadsheets of global malaria vaccine project activity, which are updated every 6 months. In November 2013, WHO and the malaria vaccine funders group launched an update to the Malaria Vaccine Technology Roadmap,6 with two new strategic goals. These goals are the development of highly efficacious vaccines to prevent malaria disease and deaths, and of vaccines designed to interrupt malaria transmission and contribute towards the long-term aim of malaria eradication. The revised goals also expand the roadmap to include P. vivax as well as P. falciparum...

The International Vaccine Institute (IVI) said it was pleased to announce the receipt of a 1 million Euro grant from the German Federal Ministry of Education and Research (BMBF) for the Dengue Vaccine Initiative (DVI). This is the first time for it to receive such a grant from Germany. These funds will support the development of a new dengue vaccine through work with the Instituto Butantan, a biomedical research center in São Paulo, Brazil, and Vabiotech, a vaccine manufacturer in Hanoi, Vietnam. Both Brazil and Vietnam have been greatly impacted by dengue. The vaccines currently in development at these institutions is a live attenuated tetravalent vaccine (LATV) candidate that has received licensure from the US National Institutes of Health (NIH). It contains four modified strains of the dengue virus. The first clinical studies of the vaccine have shown positive results, being both safe and immunogenic.

Full media release: <u>http://www.denguevaccines.org/news-events/dengue-vaccine-initiative-awarded-grant-germany-development-new-dengue-vaccines-brazil-a</u>

http://www.ivi.org/web/www/07 01?p p id=EXT BBS&p p lifecycle=0&p p state=normal&p p mode=view& EXT BBS struts action=%2Fext%2Fbbs%2Fview message& EXT BBS messa geId=581

GAVI Watch: Media Releases/Statements [to 14 December 2013]

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

:: <u>Pneumococcal vaccine to protect more than a million children in Afghanistan from leading</u> <u>child killer</u> 7 December 2013

Excerpt

Afghanistan is to begin vaccinating more than 1.2 million children against pneumococcal disease every year, President Hamid Karzai announced today.

As part of the Government of Afghanistan's ongoing efforts to improve the health of its children, life-saving pneumococcal conjugate vaccine (PCV) will be given to all infants under one year of age. The children will be protected against pneumococcal disease, the leading cause of pneumonia, which accounts for 25% of deaths in children under five years of age in Afghanistan.

With the support of the GAVI Alliance and its partners WHO and UNICEF, Afghanistan's Ministry of Public Health will begin introducing PCV into routine immunisation programmes and the vaccine will be available for free at all health facilities across the country. :: GAVI Alliance pays tribute to Nelson Mandela 06 December 2013 Following the death of Nelson Mandela, Dagfinn Høybråten, Chair of the GAVI Alliance Board, and Dr Seth Berkley, CEO of the GAVI Alliance, issued statements

UNICEF Watch

http://www.unicef.org/media/media_67204.html

Over 23 million children to be vaccinated in mass polio immunization campaign across Middle East

CAIRO/AMMAN, 9 December 2013 – The largest-ever immunization response in the Middle East is under way this week, aiming to vaccinate more than 23 million children against polio in Syria and neighbouring countries over the coming weeks.

Polio immunization campaign kicked off in the State of Palestine as part of massive regional efforts

GAZA, 9 December 2013 - Joining efforts to stop a polio outbreak in Syria from spreading across the region, UNICEF is supporting Palestinian Ministry of Health partners to immunize up to 630,000 children aged five years and younger against polio.

WHO/UNICEF: STRATEGIC PLAN FOR POLIO OUTBREAK RESPONSE

THE SYRIAN ARAB REPUBLIC AND SURROUNDING COUNTRIES – EGYPT, IRAQ, JORDAN, LEBANON, TURKEY, WEST BANK AND GAZA STRIP

DRAFT 26 NOVEMBER 2013 -- 37 pages

http://www.polioeradication.org/Portals/0/Document/InfectedCountries/MiddleEast/ME_Strategi cPlan_draft.pdf

Excerpt

EXECUTIVE SUMMARY

The "WHO/UNICEF Strategic Plan for Polio Outbreak Response in the Middle East" outlines the specific actions that will need to be implemented across the Syrian Arab Republic, Iraq, Jordan, Lebanon, Turkey, Egypt and the West Bank and Gaza Strip1 in response to the circulation of wild poliovirus (WPV) following importation. Successful implementation of all activities will meet the stated objective of the plan: to stop this outbreak by the end of March 2014.

New innovations and outbreak response guidelines form the backbone of this plan, based on lessons learnt over the past 10 years and capitalizing on new tools and tactics proven to more rapidly stop outbreaks following reinfection. The plan was jointly finalized by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) in collaboration with the ministries of health and other humanitarian aid and United Nations (UN) partners.

...Given the current situation in the Syrian Arab Republic, frequent population movements across the region and the immunization level in key areas, the risk of further international spread of WPV1 across the region is considered to be high. Thus within 24 hours of confirmation that polio had returned to the Middle East, the ministers of health from across the Eastern Mediterranean declared this reinfection a public health emergency, calling for extraordinary joint action to combat this ancient scourge.

A comprehensive outbreak response will need to be implemented across the region, with seven countries and territories to conduct mass polio vaccination campaigns targeting more than 22 million children aged under 5 years. Depending on the area and based on the evolving epidemiology, the anticipated response will last at least six to eight months. Based on a comprehensive risk assessment, priority zones of intervention have been defined, and available

resources will be allocated to these areas in order of priority. The repeated, large-scale immunization campaigns will need to reach at least 90% of the identified target population, taking full advantage of the short interval additional dose approach, proven to more rapidly boost population immunity levels, in particular in difficult-to-access areas. A surveillance alert for the entire region has been issued, and efforts are ongoing to strengthen surveillance for acute flaccid paralysis (AFP). Extensive social mobilization activities are being scaled up, to further build on a history of strong community participation for immunization services across the region.

A critical challenge will be to access all children, including those living in areas difficult to reach due to conflict or insecurity. Outbreak response must therefore be conducted within the broader humanitarian response effort to the Syrian crisis, particularly in the Syrian Arab Republic and in refugee camps and host communities of neighbouring countries. Effective coordination with international humanitarian organizations, UN agencies, national Red Crescent societies, nongovernmental organizations (NGOs) and broader civil society forms a critical aspect of the plan. The primary goal is to ensure that oral polio vaccine (OPV) is urgently delivered into all communities.

Achieving this goal will require financial support. It is estimated that the overall cost for the six-month response in all zones will be approximately US\$ 39.6 million with US\$ 13.3 million for 2013 and US\$ 26.3 million for 2014. Donors are invited to fund the polio outbreak response efforts in the Middle East through Regional Response Plan #6 (RRP6) of the Office of the United Nations High Commissioner for Refugees (UNHCR), the Syrian Humanitarian Assistance Response Plan (SHARP) and other emergency funding mechanisms. Specific funding projects for the polio outbreak and response efforts are being included in the RRP6 (surrounding countries) and in the SHARP (Syrian Arab Republic) to facilitate this process....

Update: Polio this week - As of 11 December 2013

Global Polio Eradication Initiative

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

:: New cases reported in Pakistan, including in Federally Administered Tribal Areas (FATA) and Sindh.

:: The draft strategic plan for outbreak response in the Middle East is now available online <u>here</u> [and presented above].

Pakistan

:: Four new WPV1 cases were reported in the past week: two were reported from FATA and two from Sindh. The total number of WPV1 cases for Pakistan in 2013 is now 74. The most recent WPV1 case had onset of paralysis on 26 November (from North Waziristan, FATA).

:: One new cVDPV2 case was reported in the past week. The total number of cVDPV2 cases for 2013 is 44. The most recent cVDPV2 case had onset of paralysis on 10 November (from North Waziristan).

:: 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 neighboring high-risk areas are being intensified, to further boost population immunity levels in those areas and prevent further spread of this outbreak.

Middle East

:: In Syria, no new WPV1 cases were reported in the past week. The total number of WPV1 cases remains 17. Prior to the outbreak, wild poliovirus was last reported in Syria in 1999. :: In the Middle East, a comprehensive outbreak response continues to be implemented across the region. The large-scale supplementary immunization activity which started in Syria on 24 October to vaccinate 1.6 million children against polio, measles, mumps and rubella, in both government-controlled and contested areas has been completed.

:: Seven countries and territories are holding mass polio vaccination campaigns repeatedly targeting 22 million children under the age of five years over the next 6-8 months. In a joint resolution, all countries of the WHO Eastern Mediterranean Region have declared polio eradication to be an emergency, calling for support in negotiating and establishing access to those children who are currently unreached with polio vaccination.

:: WHO and UNICEF are committed to working with all organizations and agencies providing humanitarian assistance to Syrians affected by the conflict. This includes vaccinating all Syrian children no matter where they are, whether in government or contested areas, or outside Syria.

New York Times - World Briefing / Asia

Pakistan: Vaccine Teams Attacked

By THE ASSOCIATED PRESS

Published: December 14, 2013

Attacks on <u>polio</u> teams in northwest <u>Pakistan</u> on Friday killed a polio worker and two police officers assigned to protect one of the teams, the police and a government official said. No group claimed responsibility for the attacks, but Pakistani militants have killed more than a dozen polio workers and police officers protecting them over the past year. The militants accuse health workers of acting as spies for the United States and claim that the <u>polio vaccine</u> is intended to make Muslim children sterile. The first attack was near the town of Swabi, about 60 miles northeast of Peshawar in Khyber-Pakhtunkhwa Province. Hours later, a gunman killed a polio worker on his way home after vaccinating children in Jamrud, on the outskirts of Peshawar.

The Hindu – International » South Asia

ISLAMABAD, December 12, 2013

Pakistan visitors to India will have to take oral polio vaccine

The Indian High Commission in Pakistan has issued an advisory on Wednesday that all adults and children travelling to India from Pakistan after January 30, 2014 are required to obtain Oral Polio Vaccination (OPV) at least six weeks prior to their departure to India, but not more than one year before the date of travel.

A statement said that travellers from Pakistan to India after January 30, 2014 are required to carry their vaccination record as evidence of polio vaccination and it will be requested for entry into India thereafter. Record for administering OPV may be obtained from an authorised medical centre in the format laid out in the World Health Organisation's International Health Regulations 2005 International Certificate of Vaccination (http://who.int/ihr/IVC-06-26.pdf)

Once administered OPV remains effective for one year, after which the vaccination should be taken again. The step is being taken to safeguard India's polio-free status attained after sustained efforts and investment, the statement said. It is applicable to all travellers from all countries, where polio disease is endemic or where cases of polio are reported. It is also applicable to Indian nationals travelling to and from these countries...

http://www.thehindu.com/news/international/south-asia/pakistan-visitors-to-india-will-have-to-take-oral-polio-vaccine/article5449097.ece

The **Weekly Epidemiological Record (WER) for 13 December 2013**, vol. 88, 50 (pp. 533–544) includes: :: African Programme for Onchocerciasis Control: meeting of national onchocerciasis task forces, September 2013 http://www.who.int/entity/wer/2013/wer8850.pdf

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

http://www.who.int/csr/don/2013_03_12/en/index.html :: Human infection with avian influenza A(H7N9) virus – update <u>10 December 2013</u>

CDC/MMWR Watch [to 14 December 2013]

:: Flu Press Conference: New Report Highlights Benefits of Flu Vaccine - Transcript

:: New Report Highlights Benefits of Flu Vaccine - Press Release

MMWR December 13, 2013 / Vol. 62 / No. 49

:: <u>Estimated Influenza Illnesses and Hospitalizations Averted by Influenza Vaccination — United</u> <u>States, 2012–13 Influenza Season</u>

:: Seasonal Influenza Vaccination Coverage Among Women Who Delivered a Live-Born Infant —

21 States and New York City, 2009–10 and 2010–11 Influenza Seasons

:: Progress in Immunization Information Systems - United States, 2012

:: Progress Toward Poliomyelitis Eradication — Nigeria, January 2012–September 2013

European Medicines Agency Watch [to 14 December 2013]

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

UN Watch [to 14 December 2013]

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

World Bank/IMF Watch [to 14 December 2013]

Selected media releases and other selected content relevant to immunization, vaccines, infectious diseases, global health, etc. <u>http://www.worldbank.org/en/news/all</u> *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: <u>david.r.curry@centerforvaccineethicsandpolicy.org</u>

Report: The Case for Improving Adolescent Health: Helping Prepare Adolescents for a Healthy Future

National Foundation for Infectious Diseases; Pfizer Inc.

December 2013

Excerpt for Media Release <u>http://www.multivu.com/players/English/60287-nfid-myteenhealth-</u><u>survey/</u>

The Case for Improving Adolescent Health demonstrates the need for increased attention to adolescent preventive healthcare in the US and emphasizes the role(s) that parents, teens, providers, and adults who influence teens (coaches, youth leaders, school professionals) can play to help make improvements. From the gaps in adolescent-focused programs to the preventive health barriers that exist, The Case for Improving Adolescent Health shows how behaviors and actions may affect teen health.

...In addition to serving as a checkpoint for modifiable health risk behaviors, annual checkups can help ensure that teens are getting recommended health screenings and are immunized according to recommendations. They can also provide an opportunity for confidential health discussions. Modifiable behaviors, such as lack of physical activity, poor nutrition, and tobacco and alcohol use are responsible for much chronic disease.1 Further, not all adolescents are getting vaccinated as recommended,2 leaving them potentially vulnerable to vaccinepreventable diseases such as meningococcal meningitis, whooping cough, influenza, and infection with human papillomavirus (HPV).

Adolescent Health Risks Snapshot

Vaccine-Preventable Diseases: Vaccines administered during the adolescent years can be an important determinant of future health. Four in 10 teens surveyed3 and just over three in 10 parents surveyed4 believe that vaccines are not as important for teens as for babies. However, school-aged children have the highest flu infection rates;5 adolescents 16 to 21 years, along with infants less than one year, have higher rates of meningococcal disease than other age groups;6 and HPV prevalence is estimated to be as high as 64 percent in adolescent girls.7

<u>Journal Watch</u>

Vaccines and Global Health: The Week in Review continues its weekly scanning of key peerreviewed journals to identify and cite articles, commentary and editorials, books reviews and other content supporting our focus on vaccine ethics and policy. *Journal Watch* is not 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: <u>david.r.curry@centerforvaccineethicsandpolicy.org</u>

The American Journal of Bioethics

Volume 13, Issue 12, 2013 <u>http://www.tandfonline.com/toc/uajb20/current#.Uhk8Az_hflY</u> **Special Issue Focus:** *The SUPPORT Controversy and the Debate Over Research Within the Standard of Care* [Reviewed earlier]

American Journal of Infection Control

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

American Journal of Public Health

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

American Journal of Tropical Medicine and Hygiene

December 2013; 89 (6) <u>http://www.ajtmh.org/content/current</u> [Reviewed earlier]

Annals of Internal Medicine

3 December 2013, Vol. 159. No. 11 http://annals.org/issue.aspx [Reviewed earlier]

BMC Public Health

(Accessed 14 December 2013) http://www.biomedcentral.com/bmcpublichealth/content [No new relevant content]

British Medical Bulletin

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

British Medical Journal

14 December 2013 (Vol 347, Issue 7937) http://www.bmj.com/content/347/7937 [No relevant content]

Bulletin of the World Health Organization

Volume 91, Number 12, December 2013, 897-972 <u>http://www.who.int/bulletin/volumes/91/12/en/index.html</u> [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 14 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 <u>http://onlinelibrary.wiley.com/doi/10.1111/dewb.2013.13.issue-3/issuetoc</u> [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

Eurosurveillance

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

Miscellaneous

Note from the editors: MERS-CoV – the quest for the reservoir continues Eurosurveillance editorial team

European Centre for Disease Prevention and Control (ECDC), Stockholm, Sweden

Two papers in this last Eurosurveillance issue of 2013, one by Reusken et al. [1] and one by Hemida et al. [2], look into the potential animal reservoir for the Middle East Respiratory Syndrome (MERS) coronavirus (CoV). This virus, which emerged in 2012 and was reported for the first time in September, has caused 163 cases and 71 deaths as of 2 December 2013 [3]. However, many questions remain on its origin, reservoir and transmission patterns [4].

The two papers investigate the seroprevalence of antibodies against MERS-CoV and MERSlike CoV in a similar set of domestic livestock, namely camels, cattle, goats, sheep and chicken, in two different geographic hotspots in Jordan and Saudi Arabia, respectively, where the largest described clusters of MERS have occurred to date. The papers complement each other and support the authors' earlier findings that dromedary camels could be a potential reservoir for MERS-CoV [5,6]. The results presented now are compelling evidence that in the studied regions high proportions of dromedary camels are exposed to a MERS-CoV or MERS-like CoV already in their first year of life. Hemida at al. conclude that camels could be infected early in life, and Reusken et al. additionally raise the possibility that the serological reactivity early in life could be due to maternal antibodies.

While the presented studies confirm the potential role of dromedary camels as MERS-CoV reservoir, they do not support a similar role of other common domestic livestock in the affected regions in the Middle East. Neither of the two studies detected antibodies in chicken, cattle or goats. Although most tests in sheep were negative, one particular assay gave positive results in a few animals, and the authors stress that this needs further investigation.

While the papers in today's issue provide further insight into the possible animal reservoir, the primary source of MERS-CoV infections remains unclear and the link to humans needs to be elucidated further as exposure to animals has only been documented for a limited number of human MERS cases. We look forward to seeing more studies in the near future that will shed light on the as yet unknown characteristics of this disease that raised much attention among infectious disease experts in 2013...

Rapid Communications

Middle East Respiratory Syndrome coronavirus (MERS-CoV) serology in major livestock species in an affected region in Jordan, June to September 2013

by CB Reusken, M Ababneh, VS Raj, B Meyer, A Eljarah, S Abutarbush, GJ Godeke, TM Bestebroer, I Zutt, MA Müller, BJ Bosch, PJ Rottier, AD Osterhaus, C Drosten, BL Haagmans, MP Koopmans

<u>Middle East Respiratory Syndrome (MERS) coronavirus seroprevalence in domestic</u> <u>livestock in Saudi Arabia, 2010 to 2013</u>

by MG Hemida, RA Perera, P Wang, MA Alhammadi, LY Siu, M Li, LL Poon, L Saif, A Alnaeem, M Peiris

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

Global Health Governance

http://blogs.shu.edu/ghg/category/complete-issues/summer-2013/ How "Global" is "Global Health" Examining the Geographic Diversity of Global Health Thinkers

December 6, 2013Posted in: <u>Summer 2013</u>
Tess van der Rijt and Tikki Pang

Many health issues are transnational in nature and cannot be contained within national borders. Global health is therefore an area of study and research that should involve the collective opinions and ideas of diverse global health thinkers. This paper poses the question: how "global" is "global health"? Through an analysis of four different contributors shaping global health, including academics, journals, health institutions and presenters at global health conferences, this paper aims to determine if the development of global health is truly global. The paper concludes that global health is not being shaped by those who are most affected by it; the majority of people influencing and defining global health priorities represent institutions based in the developed world. A number of trends and opportunities are identified and recommendations are made to ameliorate the observed imbalance. Full text: http://blogs.shu.edu/ghg/wp-content/blogs.dir/109/files/2013/12/van-der-Rijt_Manuscript_Copyedit_Spring_2013.pdf

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 Cervical cancer and the global health agenda: Insights from multiple policy-analysis frameworks Justin O. Parkhurst & Madhulika Vulimiri pages 1093-1108 Open access DOI:10.1080/17441692.2013.850524 Published online: 18 Nov 2013

http://www.tandfonline.com/doi/abs/10.1080/17441692.2013.850524#.Uq0Dw-Ky-F8 Abstract

Cervical cancer is the second leading cause of cancer deaths for women globally, with an estimated 88% of deaths occurring in the developing world. Available technologies have dramatically reduced mortality in high-income settings, yet cervical cancer receives considerably little attention on the global health policy landscape. The authors applied four policy-analysis frameworks to literature on global cervical cancer to explore the question of why cervical cancer may not be receiving the international attention it may otherwise warrant. Each framework explores the process of agenda setting and discerns factors that either facilitate or hinder policy change in cases where there is both a clear problem and a potential effective solution. In combination, these frameworks highlight a number of crucial elements that may be needed to raise the profile of cervical cancer on global health agendas, including improving local (national or sub-national) information on the condition; increasing mobilisation of affected civil society groups; framing cervical cancer debates in ways that build upon its classification as a noncommunicable disease (NCD) and an issue of women's rights; linking cervical cancer screening to well-funded services such as those for HIV treatment in some countries; and identifying key global policy windows of opportunity to promote the cervical cancer agenda, including emerging NCD global health discussions and post-2015 reviews of the Millennium Development Goals. Listening to the rumours: What the northern Nigeria polio vaccine boycott can tell

<u>us ten years on</u>

Isaac Ghinai, Chris Willott, Ibrahim Dadari & Heidi J. Larson

pages 1138-1150

DOI:10.1080/17441692.2013.859720

Published online: 03 Dec 2013

http://www.tandfonline.com/doi/abs/10.1080/17441692.2013.859720#.Uq0EP-Ky-F8 Abstract

In 2003 five northern Nigerian states boycotted the oral polio vaccine due to fears that it was unsafe. Though the international responses have been scrutinised in the literature, this paper argues that lessons still need to be learnt from the boycott: that the origins and continuation of the boycott were due to specific local factors. We focus mainly on Kano state, which initiated the boycotts and continued to reject immunisations for the longest period, to provide a focused analysis of the internal dynamics and complex multifaceted causes of the boycott. We argue that the delay in resolving the year-long boycott was largely due to the spread of rumours at local levels, which were intensified by the outspoken involvement of high-profile individuals whose views were misunderstood or underestimated. We use sociological concepts to analyse why these men gained influence amongst northern Nigerian communities. This study has implications on contemporary policy: refusals still challenge the Global Polio Eradication Initiative; and polio remains endemic to Nigeria (Nigeria accounted for over half of global cases in 2012). This paper sheds light on how this problem may be tackled with the ultimate aim of vaccinating more children and eradicating polio.

Health Affairs

December 2013; Volume 32, Issue 12 <u>http://content.healthaffairs.org/content/current</u> 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/

Editorial: The post-2015 development agenda, human rights, evidence, and openaccess publishing

Carmel Williams

Health and Human Rights 2013, 15/2

http://www.hhrjournal.org/2013/12/10/editorial-the-post-2015-development-agenda-humanrights-evidence-and-open-access-publishing/

Excerpt

In the current planning phase for the post-2015 development agenda, there is guarded optimism that human rights will occupy a more central role than they did in the Millennium Development Goals (MDGs). The United Nations Development Programme (UNDP) facilitated global consultations in 2012 to shape the post-2015 development agenda. Nineteen UN Task Team "thematic think pieces" resulted, most of which specifically refer to the importance of integrating human rights into development goals. The UNDP acknowledged an emerging global endorsement of human rights-based approaches to development, based on the principles of participation, accountability, non-discrimination, empowerment and the rule of law, and that it must be the core of the post-2015 agenda.1...

Special Issue Articles in Collaboration with Open Society Foundations Human Rights in Patient Care

Health Economics, Policy and Law

Volume 8 / Issue 04 / October 2013 <u>http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue</u> [Reviewed earlier; No relevant content]

Health Policy and Planning

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

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)

December 2013 Volume 9, Issue 12 <u>http://www.landesbioscience.com/journals/vaccines/toc/volume/9/issue/12/</u> [Reviewed earlier]

Infectious Agents and Cancer

http://www.infectagentscancer.com/content [Accessed 14 December 2013] [No new relevant content]

Infectious Diseases of Poverty

http://www.idpjournal.com/content [Accessed 14 December 2013] [No new relevant content]

International Journal of Epidemiology

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

International Journal of Infectious Diseases

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

JAMA

December 11, 2013, Vol 310, No. 22 <u>http://jama.jamanetwork.com/issue.aspx</u> [No relevant content]

JAMA Pediatrics

December 2013, Vol 167, No. 12 <u>http://archpedi.jamanetwork.com/issue.aspx</u> [Reviewed earlier]

Journal of Community Health

Volume 38, Issue 6, December 2013 <u>http://link.springer.com/journal/10900/38/6/page/1</u> [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 <u>http://jid.oxfordjournals.org/content/current</u> [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 <u>http://www.jgid.org/currentissue.asp?sabs=n</u> [No relevant content]

Journal of Medical Ethics

January 2014, Volume 40, Issue 1 <u>http://jme.bmj.com/content/current</u> [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 3 September 2013 <u>http://jpids.oxfordjournals.org/content/current</u> [Reviewed earlier]

Journal of Pediatrics

Vol 163 | No. 6 | December 2013 | Pages 1537-1798 <u>http://www.jpeds.com/current</u> [Reviewed earlier; No relevant content]

Journal of Public Health Policy

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

Journal of the Royal Society – Interface February 6, 2014; 11 (91) <u>http://rsif.royalsocietypublishing.org/content/current</u> [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 14, 2013 Volume 382 Number 9909 p1957 – 2038 e41 - 47 http://www.thelancet.com/journals/lancet/issue/current

Comment

What's happening in Bangladesh?

Amartya Sen

Preview | Full Text | PDF

Self-assured commentators who saw Bangladesh as a "basket case" not many years ago could not have expected that the country would jump out of the basket and start sprinting ahead even as expressions of sympathy and pity were pouring in. This informative Lancet Series on Bangladesh1–6 helps to explain what happened—and why. It is important to understand how a country that was extremely poor a few decades ago, and is still very poor, can make such remarkable accomplishments particularly in the field of health, but also in social transformation in general.

Transmission and evolution of the Middle East respiratory syndrome coronavirus in Saudi Arabia: a descriptive genomic study

<u>Matthew Cotten PhD b</u> <u>+</u>, <u>Simon J Watson PhD b</u> <u>+</u>, Prof <u>Paul Kellam PhD b</u> <u>m</u> <u>+</u>, <u>Abdullah A Al-Rabeeah</u> FRCS <u>a</u>, <u>Hatem Q Makhdoom</u> PhD <u>c</u>, <u>Abdullah Assiri</u> MD <u>a</u>, <u>Jaffar A Al-Tawfiq</u> MD <u>d</u>, <u>Rafat F Alhakeem</u> MD <u>a</u>, <u>Hossam Madani</u> PhD <u>c</u>, <u>Fahad A AlRabiah</u> MD <u>g</u>, <u>Sami Al Hajjar</u> MD <u>g</u>, <u>Wafa N Al-nassir</u> MD <u>h</u>, <u>Ali Albarrak</u> MD <u>i</u>, <u>Hesham Flemban</u> MD <u>j</u>, <u>Hanan H Balkhy</u> MD <u>k</u>, <u>Sarah</u> <u>Alsubaie</u> MD <u>l</u>, <u>Anne L Palser</u> PhD <u>b</u>, <u>Astrid Gall</u> Dr Med Vet <u>b</u>, <u>Rachael Bashford-Rogers</u> MChem <u>b</u>, Prof <u>Andrew Rambaut</u> Prof <u>e</u> <u>f</u>, Prof <u>Alimuddin I Zumla</u> FRCP <u>a</u> <u>m</u> <u>n</u> <u>+</u>, Prof <u>Ziad A Memish</u> FRCP <u>a</u>

http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2813%2961887-5/abstract Summary

Background

Since June, 2012, Middle East respiratory syndrome coronavirus (MERS-CoV) has, worldwide, caused 104 infections in people including 49 deaths, with 82 cases and 41 deaths reported from Saudi Arabia. In addition to confirming diagnosis, we generated the MERS-CoV genomic sequences obtained directly from patient samples to provide important information on MERS-CoV transmission, evolution, and origin.

Methods

Full genome deep sequencing was done on nucleic acid extracted directly from PCR-confirmed clinical samples. Viral genomes were obtained from 21 MERS cases of which 13 had 100%, four 85—95%, and four 30—50% genome coverage. Phylogenetic analysis of the 21 sequences, combined with nine published MERS-CoV genomes, was done. Findings

Three distinct MERS-CoV genotypes were identified in Riyadh. Phylogeographic analyses suggest the MERS-CoV zoonotic reservoir is geographically disperse. Selection analysis of the MERS-CoV genomes reveals the expected accumulation of genetic diversity including changes in the S protein. The genetic diversity in the Al-Hasa cluster suggests that the hospital outbreak might have had more than one virus introduction.

Interpretation

We present the largest number of MERS-CoV genomes (21) described so far. MERS-CoV full genome sequences provide greater detail in tracking transmission. Multiple introductions of MERS-CoV are identified and suggest lower R0 values. Transmission within Saudi Arabia is consistent with either movement of an animal reservoir, animal products, or movement of infected people. Further definition of the exposures responsible for the sporadic introductions of MERS-CoV into human populations is urgently needed.

Funding

Saudi Arabian Ministry of Health, Wellcome Trust, European Community, and National Institute of Health Research University College London Hospitals Biomedical Research Centre. *Series*

Bangladesh: Innovation for Universal Health Coverage

Community-based approaches and partnerships: innovations in health-service delivery in Bangladesh

Shams El Arifeen, Aliki Christou, Laura Reichenbach, Ferdous Arfina Osman, Kishwar Azad, Khaled Shamsul Islam, Faruque Ahmed, Henry B Perry, David H Peters <u>Preview</u> | <u>Summary</u> | <u>Full Text</u> | <u>PDF</u>

Bangladesh: Innovation for Universal Health Coverage

Explaining equity gains in child survival in Bangladesh: scale, speed, and selectivity in health and development

Alayne M Adams, Atonu Rabbani, Shamim Ahmed, Shehrin Shaila Mahmood, Ahmed Al-Sabir, Sabina F Rashid, Timothy G Evans

Preview | Summary | Full Text | PDF

The Lancet Global Health

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

The Lancet Infectious Diseases

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

Medical Decision Making (MDM)

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

Health Numeracy

The Importance of Domain in Assessing Numeracy

Helen Levy, PhD, Peter A. Ubel, MD, Amanda J. Dillard, PhD, David R. Weir, PhD, Angela Fagerlin, PhD

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School of Public Health, University of Michigan, Ann Arbor, MI (HL)

Gerald R. Ford School of Public Policy, University of Michigan, Ann Arbor, MI (HL)

Fuqua School of Business, Sanford School of Public Policy, and School of Medicine, Duke University, Durham, NC (PAU)

Department of Psychology, Grand Valley State University, Allendale, MI (AJD)

VA Ann Arbor Center for Clinical Management Research, Ann Arbor, MI (AF)

Division of General Internal Medicine, University of Michigan, Ann Arbor, MI (AF)

Center for Bioethics and Social Sciences in Medicine, Ann Arbor, MI (AF)

Helen Levy, Survey Research Center, Institute for Social Research, University of Michigan, 426 Thompson St., Ann Arbor, MI 48104; e-mail: <u>hlevy@umich.edu</u>. *Abstract*

Background and Objective. Existing research concludes that measures of general numeracy can be used to predict individuals' ability to assess health risks. We posit that the domain in which questions are posed affects the ability to perform mathematical tasks, raising the possibility of a separate construct of "health numeracy" that is distinct from general numeracy. The objective was to determine whether older adults' ability to perform simple math depends on domain. Methods. Community-based participants completed 4 math questions posed in 3 different domains: a health domain, a financial domain, and a pure math domain. Participants were 962 individuals aged 55 and older, representative of the community-dwelling US population over age 54.

Results. We found that respondents performed significantly worse when questions were posed in the health domain (54% correct) than in either the pure math domain (66% correct) or the financial domain (63% correct). Our experimental measure of numeracy consisted of only 4 questions, and it is possible that the apparent effect of domain is specific to the mathematical tasks that these questions require.

Conclusions. These results suggest that health numeracy is strongly related to general numeracy but that the 2 constructs may not be the same. Further research is needed into how different aspects of general numeracy and health numeracy translate into actual medical decisions.

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 7479 pp187-324 12 December 2013 http://www.nature.com/nature/current_issue.html [No relevant content]

Nature Immunology

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

Nature Medicine

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

Nature Reviews Immunology

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

New England Journal of Medicine

December 12, 2013 Vol. 369 No. 24 <u>http://www.nejm.org/toc/nejm/medical-journal</u> [No relevant content]

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 <u>http://pediatrics.aappublications.org/current.shtml</u> [Reviewed earlier]

Pharmaceutics

Volume 5, Issue 3 (September 2013), Pages 371-507 http://www.mdpi.com/1999-4923/5/3 [No new relevant content]

Pharmacoeconomics Volume 31, Issue 12, December 2013 http://link.springer.com/journal/40273/31/12/page/1 Assessing the Cost Effectiveness of Pre-Exposure Prophylaxis for HIV Prevention in the US Fred J. Hellinger

Download PDF (277 KB) View Article http://link.springer.com/article/10.1007/s40273-013-0111-0 Abstract

About 50,000 people are infected with HIV in the US each year and this number has remained virtually the same for the past decade. Yet, in the last few years, evidence from several multinational randomized clinical trials has shown that the provision of antiretroviral drug to uninfected persons (i.e. pre-exposure prophylaxis) reduces the incidence of HIV by about 50 %. However, evidence from cost-effectiveness studies conducted in the US yield widely varying estimates of the cost per quality-adjusted life-year (QALY) gained, and this variation reflects the substantial uncertainty surrounding the determinants of HIV transmission (e.g. adherence rates to prophylactic medications, the average number of sexual partners, the number and types of sexual acts, the viral load of infected partners, and the proportion of contacts where condoms are used), as well as different approaches to translating a reduction in HIV cases into an estimate of the increase in the number of QALYs.

PLoS One

[Accessed 14 December 2013]

http://www.plosone.org/

Research Article

Next Generation Inactivated Polio Vaccine Manufacturing to Support Post Polio-Eradication Biosafety Goals

Yvonne E. Thomassenl, Aart G. van 't Oever, Monique G. C. T. van Oijen, René H. Wijffels, Leo A. van der Pol, Wilfried A. M. Bakker

http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0083374 Abstract

Worldwide efforts to eradicate polio caused a tipping point in polio vaccination strategies. A switch from the oral polio vaccine, which can cause circulating and virulent vaccine derived polioviruses, to inactivated polio vaccines (IPV) is scheduled. Moreover, a manufacturing process, using attenuated virus strains instead of wild-type polioviruses, is demanded to enhance worldwide production of IPV, especially in low- and middle income countries. Therefore, development of an IPV from attenuated (Sabin) poliovirus strains (sIPV) was pursued. Starting from the current IPV production process based on wild type Salk strains, adaptations, such as lower virus cultivation temperature, were implemented. sIPV was produced at industrial scale followed by formulation of both plain and aluminium adjuvanted sIPV. The final products met the quality criteria, were immunogenic in rats, showed no toxicity in rabbits and could be released for testing in the clinic. Concluding, sIPV was developed to manufacturing scale. The technology can be transferred worldwide to support post polio-eradication biosafety goals.

Research Article

Gathering and Exploring Scientific Knowledge in Pharmacovigilance

Pedro Lopes, Tiago Nunes, David Campos, Laura Ines Furlong, Anna Bauer-Mehren, Ferran Sanz, Maria Carmen Carrascosa, Jordi Mestres, Jan Kors, Bharat Singh, Erik van Mulligen, Johan Van der Lei, Gayo Diallo, [...],

http://www.plosone.org/article/info%3Adoi%2F10.1371%2Fjournal.pone.0083016 Abstract

Pharmacovigilance plays a key role in the healthcare domain through the assessment, monitoring and discovery of interactions amongst drugs and their effects in the human

organism. However, technological advances in this field have been slowing down over the last decade due to miscellaneous legal, ethical and methodological constraints. Pharmaceutical companies started to realize that collaborative and integrative approaches boost current drug research and development processes. Hence, new strategies are required to connect researchers, datasets, biomedical knowledge and analysis algorithms, allowing them to fully exploit the true value behind state-of-the-art pharmacovigilance efforts. This manuscript introduces a new platform directed towards pharmacovigilance knowledge providers. This system, based on a service-oriented architecture, adopts a plugin-based approach to solve fundamental pharmacovigilance software challenges. With the wealth of collected clinical and pharmaceutical data, it is now possible to connect knowledge providers' analysis and exploration algorithms with real data. As a result, new strategies allow a faster identification of high-risk interactions between marketed drugs and adverse events, and enable the automated uncovering of scientific evidence behind them. With this architecture, the pharmacovigilance field has a new platform to coordinate large-scale drug evaluation efforts in a unique ecosystem, publicly available at http://bioinformatics.ua.pt/euadr/.

PLoS Medicine

(Accessed 14 December 2013) http://www.plosmedicine.org/

Data Sharing in a Humanitarian Organization: The Experience of Médecins Sans Frontières

Unni Karunakara

Published: December 10, 2013 DOI: 10.1371/journal.pmed.1001562

http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1001562 Summary Points

:: Public health crises such as the spread of drug-resistant tuberculosis highlight the need for improved sharing of data. For humanitarian organizations, there is a lack of guidance on the practical aspects of making such data available.

:: In 2012 the medical humanitarian organization Médecins Sans Frontières (MSF) decided to adopt a data sharing policy for routinely collected clinical and research data. Here we describe how this policy was developed, the principles underlying it, and the practical measures taken to facilitate data sharing.

:: The MSF policy builds on the principles of ethical, equitable, and efficient data sharing to include aspects relevant for an international humanitarian organization, in particular concerning highly sensitive data (non-maleficence), benefit sharing (social benefit), and intellectual property (open access).

:: There are aspirations to create a truly open dataset, but the initial aim is to enable data sharing via a managed access procedure so that security, legal, and ethical concerns can be addressed.

PLoS Neglected Tropical Diseases

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

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

(Accessed 14 December 2013) http://www.pnas.org/content/early/recent [No new relevant content]

Pneumonia

Vol 2 (2013) <u>https://pneumonia.org.au/index.php/pneumonia/issue/current</u> *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 <u>http://phe.oxfordjournals.org/content/current</u> [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 <u>http://www.paho.org/journal/index.php?option=com_content&view=article&id=133&Itemid=22</u> <u>9&lang=en</u> [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

13 December 2013 vol 342, issue 6164, pages 1281-1404 http://www.sciencemag.org/current.dtl

Policy Forum - Ethics The Bioethics Commission on Incidental Findings

Amy Gutmann

http://www.sciencemag.org/content/342/6164/1321.summary

Perspective - Epidemiology

Coming to an Airport Near You

Angela R. McLean

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Faced with the complexity of the global spread of new infections, a common approach has been to create enormous computer simulations (1, 2). Most of these studies have yielded only tenuous insights, and scientific understanding has been slow to accrue. On page 1337 of this issue, Brockmann and Helbing (3) identify a useful metric—the effective distance—that helps to understand the spread of contagion across a travel network. Once this measure is specified, the global spread of infection can be understood as a simple reaction-diffusion process across the defined transportation network.

Research Article

The Hidden Geometry of Complex, Network-Driven Contagion Phenomena

Dirk Brockmann1,2,3,*, Dirk Helbing4,5

1Robert-Koch-Institute, Seestraße 10, 13353 Berlin, Germany.

2Institute for Theoretical Biology, Humboldt-University Berlin, Invalidenstraße 42, 10115 Berlin, Germany.

3Department of Engineering Sciences and Applied Mathematics and Northwestern Institute on Complex Systems, Northwestern University, Evanston, IL 60208, USA.

4ETH Zurich, Swiss Federal Institute of Technology, CLU E1, Clausiusstraße 50, 8092 Zurich, Switzerland.

5Risk Center, ETH Zurich, Scheuchzerstraße 7, 8092 Zurich, Switzerland. http://www.sciencemag.org/content/342/6164/1337.abstract

Abstract

The global spread of epidemics, rumors, opinions, and innovations are complex, network-driven dynamic processes. The combined multiscale nature and intrinsic heterogeneity of the underlying networks make it difficult to develop an intuitive understanding of these processes, to distinguish relevant from peripheral factors, to predict their time course, and to locate their origin. However, we show that complex spatiotemporal patterns can be reduced to surprisingly simple, homogeneous wave propagation patterns, if conventional geographic distance is replaced by a probabilistically motivated effective distance. In the context of global, air-traffic-mediated epidemics, we show that effective distance reliably predicts disease arrival times. Even if epidemiological parameters are unknown, the method can still deliver relative arrival times. The approach can also identify the spatial origin of spreading processes and successfully be applied to data of the worldwide 2009 H1N1 influenza pandemic and 2003 SARS epidemic.

Science Translational Medicine

11 December 2013 vol 5, issue 215 <u>http://stm.sciencemag.org/content/current</u> [No relevant content]

Social Science & Medicine

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

UN Chronicle

Vol. L No. 3 2013 September 2013 http://unchronicle.un.org/

Theme: <u>Migration</u>

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

Vaccine

Volume 32, Issue 1, Pages 1-204 (17 December 2013) http://www.sciencedirect.com/science/journal/0264410X/32 Priorities for CMV vaccine development

Review Article

Pages 4-10

Philip R. Krause, Stephanie R. Bialek, Suresh B. Boppana, Paul D. Griffiths, Catherine A. Laughlin, Per Ljungman, Edward S. Mocarski, Robert F. Pass, Jennifer S. Read, Mark R. Schleiss, Stanley A. Plotkin

Abstract

A multidisciplinary meeting addressed priorities related to development of vaccines against cytomegalovirus (CMV), the cause of congenital CMV (cCMV) disease and of serious disease in the immunocompromised. Participants discussed optimal uses of a CMV vaccine, aspects of clinical study design, and the value of additional research. A universal childhood CMV vaccine could potentially rapidly reduce cCMV disease, as infected children are sources of viral transmission to seronegative and seropositive mothers. A vaccine administered to adolescents or adult women could also reduce cCMV disease by making them immune prior to pregnancy. Clinical trials of CMV vaccines in women should evaluate protection against cCMV infection, an essential precursor of cCMV disease, which is a more practical and acceptable endpoint for assessing vaccine effects on maternal-fetal transmission. Clinical trials of vaccines to evaluate prevention of CMV disease in stem cell transplant recipients could use CMV viremia at a level triggering pre-emptive antiviral therapy as an endpoint, because widespread use of pre-emptive and prophylactic antivirals has rendered CMV-induced disease too rare to be a practical endpoint for clinical trials. In solid organ transplant patients, CMV-associated disease is sufficiently common for use as a primary endpoint. Additional research to advance CMV vaccine development should include identifying factors that predict fetal loss due to CMV, determining age-specific incidence and transmission rates, defining the mechanism and relative contributions of maternal reactivation and re-infection to cCMV disease, developing assays that can distinguish between reactivation and re-infection in seropositive vaccinees, further defining predictors of sequelae from cCMV infection, and identifying clinically relevant immune response

parameters to CMV (including developing validated assays that could assess CMV antibody avidity) that could lead to the establishment of immune correlates of protection.

Acceptability and uptake of female adolescent HPV vaccination in Hong Kong: A survey of mothers and adolescents

Original Research Article

Pages 78-84

Horace C.W. Choi, Gabriel M. Leung, Pauline P.S. Woo, Mark Jit, Joseph T. Wu *Abstract*

ADSUI dCL Background

Background

Organized population-based HPV vaccination programs can be effective in reducing the burden of cervical cancer, especially in the absence of a comprehensive cervical screening program (e.g. Hong Kong). Assessment of vaccine acceptability is important when evaluating the feasibility and cost-effectiveness of such vaccination programs. Methods

To provide a more representative and updated assessment on the acceptability of female adolescent HPV vaccination in Hong Kong, we conducted surveys in 2008 among 1022 mothers with daughters aged \leq 18 years through random digit-dialing telephone interviewing and 2167 schoolgirls aged 11–18 years using two-stage stratified cluster sampling. We conducted the maternal survey again in 2012 with an independent group of 1005 mothers. Results

In 2008, 2.4% (95% confidence interval [CI] = 1.8–3.2%) of the recruited schoolgirls reported having received HPV vaccination. In 2012, the mothers reported that 9.1% (7.0–11.6%) of their daughters who were in the same age range (11–18 years) as the schoolgirls had been vaccinated (p < 0.01). Regarding acceptability, 27.5% (24.8–30.4%) and 37.6% (34.5–40.8%) of the mothers were willing to have their daughters vaccinated at market price in 2008 and 2012 (p < 0.01), respectively. 27.1% (25.2–29.1%) of the schoolgirls were willing to receive HPV vaccination at market price in 2008. The willingness to pay for full-course vaccination among mothers had a median of US\$128/HK\$1000 (50% central range = US\$64–192/HK\$500–1500), i.e. substantially lower than the current market price.

Conclusions

The gap between acceptability and actual uptake of HPV vaccination among adolescent girls suggested that coverage is likely to be low without an organized HPV vaccination program, although the difference might be partially attributed to the possibility that at the time of the interview female adolescents who were willing to be vaccinated had not yet taken action. Policymakers should devise tailored, targeted and efficient vaccination strategies to achieve universal coverage for an effectively organized HPV vaccination program.

Socio-demographic determinants of timely adherence to BCG, Penta3, measles, and complete vaccination schedule in Burkina Faso

Original Research Article

Pages 96-102

A. Schoeps, N. Ouédraogo, M. Kagoné, A. Sié, O. Müller, H. Becher

Abstract

Objective

To identify the determinants of timely vaccination among young children in the North-West of Burkina Faso.

Methods

This study included 1665 children between 12 and 23 months of age from the Nouna Health and Demographic Surveillance System, born between September 2006 and December 2008.

The effect of socio-demographic variables on timely adherence to the complete vaccination schedule was studied in multivariable ordinal logistic regression with 3 distinct endpoints: (i) complete timely adherence, (ii) failure, and (iii) missing vaccination. Three secondary endpoints were timely vaccination with BCG, Penta3, and measles, which were studied with standard multivariable logistic regression.

Results

Mothers' education, socio-economic status, season of birth, and area of residence were significantly associated with failure of timely adherence to the complete vaccination schedule. Year of birth, ethnicity, and the number of siblings was significantly related to timely vaccination with Penta3 but not with BCG or measles vaccination. Children living in rural areas were more likely to fail timely vaccination with BCG than urban children (OR=1.79, 95%CI=1.24–2.58 (proximity to health facility), OR=3.02, 95%CI=2.18–4.19 (long distance to health facility)). In contrast, when looking at Penta3 and measles vaccination, children living in rural areas were far less likely to have failed timely vaccinations than urban children. Mother's education positively influenced timely adherence to the vaccination schedule (OR=1.42, 95%CI 1.06–1.89). There was no effect of household size or the age of the mother.

Conclusions

Additional health facilities and encouragement of women to give birth in these facilities could improve timely vaccination with BCG. Rural children had an advantage over the urban children in timely vaccination, which is probably attributable to outreach vaccination teams amongst other factors. As urban children rely on their mothers' own initiative to get vaccinated, urban mothers should be encouraged more strongly to get their children vaccinated in time.

Vaccine: Development and Therapy

(Accessed 14 December 2013) <u>http://www.dovepress.com/vaccine-development-and-therapy-journal</u> [No new relevant content]

Vaccines — Open Access Journal

(Accessed 14 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 [No relevant content]

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

Identification of vaccine-derived polioviruses using dual-stage real-time RT-PCR

DR Kilpatrick, K Ching, J Iber, Q Chen, SJ Yang, L De... - Journal of Virological ..., 2013 Abstract Vaccine-derived polioviruses (VDPVs) are associated with polio outbreaks and prolonged infections in individuals with primary immunodeficiencies. VDPV-specific PCR assays for each of the three Sabin oral poliovirus vaccine (OPV) strains were developed, ...

Effectiveness of Influenza Vaccination in Institutionalized Older Adults: A Systematic Review

TC Chan, I Fan-Ngai Hung, J Ka-Hay Luk, LW Chu... - Journal of the American ..., 2013 ... adults. Criticism regarding the effectiveness of influenza vaccine estimated by nonrandomized observational studies include the frailty selection bias and use of nonspecific outcome, such as all-cause mortality. Methods. We ...

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 14 December 2013 [No new, unique, relevant content]

The Atlantic

http://www.theatlantic.com/magazine/ Accessed 14 December 2013 [No new, unique, relevant content]

BBC

http://www.bbc.co.uk/ Accessed 14 December 2013 [No new, unique, relevant content]

Brookings

http://www.brookings.edu/ Accessed 14 December 2013 [No new, unique, relevant content]

Council on Foreign Relations

<u>http://www.cfr.org/</u> Accessed 14 December 2013 [No new, unique, relevant content]

Economist

http://www.economist.com/ Accessed 14 December 2013 [No new, unique, relevant content]

Financial Times

http://www.ft.com Accessed 14 December 2013 [No new, unique, relevant content]

Forbes

http://www.forbes.com/ Accessed 14 December 2013 [No new, unique, relevant content]

Foreign Affairs

http://www.foreignaffairs.com/ Accessed 14 December 2013

Rethinking Foreign Aid – Five Ways to Improve Development Assistance By Paul Farmer http://www.foreignaffairs.com/print/137485

Excerpt

So much is written and said about foreign aid that it has become difficult to contribute meaningfully to the debate about whether it is effective. But if we are charting our fates as citizens of a crowded, fragile planet, then any honest assessment must conclude that progress has been made, whether in terms of child survival or literacy or access to basic sanitation. Still, profound social disparities exist; so too does extreme poverty. And the prospects of those living on less than two dollars a day remain grim.

With the stakes as high as they are, the need to challenge the assumptions we make about aid is paramount. Myths and mystifications about aid persist. Whether we speak of feedback loops or best practices -- or, perhaps, simply better practices -- we have a long way to go.

Despite agreements on aid effectiveness reached in Rome, Paris, Accra, and Busan over the last decade, 80 percent of aid from major bilateral and multilateral donors to fragile countries still bypasses the systems of local public institutions. But the aspiration to improve the lives of those living in extreme poverty through better public health, public education, and public works by definition requires public-sector capacity.

By way of example, consider some data from Haiti after the 2010 earthquake. Based on United Nations estimates, bilateral and multilateral donors channeled \$6.04 billion in humanitarian and recovery funding to Haiti from 2010 to 2012, but disbursed less than 10 percent of it directly to the Haitian government. Just 0.9 percent of immediate relief aid right after the earthquake (totaling \$2.41 billion) made it directly to the Haitian government. Even the local NGOs and businesses were excluded: less than 0.6 percent of that \$6.04 billion was invested in Haitian organizations and businesses. One of the top bilateral donors in Haiti awarded only 1.4 percent of its contracts to local companies....

Foreign Policy

http://www.foreignpolicy.com/ Accessed 14 December 2013 [No new, unique, relevant content]

The Guardian

http://www.guardiannews.com/ Accessed 14 December 2013 [No new, unique, relevant content]

The Huffington Post

http://www.huffingtonpost.com/ Accessed 14 December 2013 [No new, unique, relevant content]

Le Monde

http://www.lemonde.fr/ Accessed 14 December 2013 [No new, unique, relevant content]

New Yorker

http://www.newyorker.com/ Accessed 14 December 2013 [No new, unique, relevant content]

New York Times

http://www.nytimes.com/ Accessed 14 December 2013 [No new, unique, relevant content]

Reuters

http://www.reuters.com/ Accessed 14 December 2013 [No new, unique, relevant content]

Wall Street Journal

http://online.wsj.com/home-page Accessed 14 December 2013

NYC to require flu shots for 150,000 children

NEW YORK — New York City soon will require young children who go to preschool or day care to get the flu vaccine.

Washington Post

http://www.washingtonpost.com/ Accessed 14 December 2013

Princeton vaccine reaches 90 percent of eligible

Princeton University officials say more than 90 percent of the eligible students and staff received a meningitis vaccine this week as part of the university's effort to halt an outbreak.

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Vaccines and Global Health: The Week in Review is a service of the Center for Vaccines Ethics and Policy (<u>CVEP</u>) which is solely responsible for its content. Support for this service is provided by its governing institutions – <u>Department of Medical Ethics, NYU Medical School</u>; <u>The Wistar Institute Vaccine</u> <u>Center</u> and the <u>Children's Hospital of Philadelphia Vaccine Education Center</u>. Additional support is provided by the <u>PATH Vaccine Development Program</u> and the <u>International Vaccine Institute</u> (IVI), and by vaccine industry leaders including Janssen, Pfizer, and Sanofi Pasteur U.S. (list in formation), as well as the Developing Countries Vaccine Manufacturers Network (<u>DCVMN</u>). 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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