Center for Vaccine Ethics and Policy
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Vaccines and Global Health: The Week in Review
29 March 2014
Center for Vaccine Ethics & Policy (CVEP)

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

Comments and suggestions should be directed to
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WHO: South-East Asia Region certified polio-free

SEAR/PR 1569

New Delhi, 27 March: WHO South-East Asia Region, home to a quarter of the world's population, was certified polio-free today by an independent commission under the WHO certification process. This is the fourth of six WHO Regions to be certified, marking an important step towards global polio eradication. With this step, 80% of the world's population now lives in certified polio-free regions.

An independent panel of 11 experts in public health, epidemiology, virology, clinical medicine and related specialties constituting the South-East Asia Regional Certification Commission for Polio Eradication (SEA-RCCPE) met for two days to review evidence from countries before reaching the decision that all 11 countries of the Region are now polio-free and have met the requirements for certification…

… "This is a momentous victory for the millions of health workers who have worked with governments, nongovernmental organizations, civil society and international partners to eradicate polio from the Region. It is a sign of what we can bequeath our children when we work together," said Dr Poonam Khetrapal Singh, Regional Director for the WHO South-East Asia Region…

…While celebrating the historic achievement, the WHO Regional Director also sounded a word of caution to maintain high vigilance against importation of polio. "Until polio is globally eradicated, all countries are at risk and the Region's polio-free status remains fragile. High immunization coverage can prevent an imported virus from finding an underimmunized, susceptible population. A sensitive surveillance system, able to quickly detect and identify any importation and guide a programmatic response, is critical," she added.

Full press release: http://www.searo.who.int/mediacentre/releases/2014/pr1569/en/
:: Polio-free certification of the WHO South East Asia Region
:: Photo Story - How communities are being informed about immunization services

WHO: Poliomyelitis - intensification of the global eradication initiative
Report by the Secretariat
67th World Health Assembly
A67/38 - Provisional agenda item 16.4
21 March 2014
Editor's selected segments and bolding; full text here
:: OBJECTIVE 1: POLIOVIRUS DETECTION AND INTERRUPTION
…5. **Insecurity, targeted attacks on health workers and/or a ban by local authorities on polio immunization resulted in a deterioration in access in the Federally Administered Tribal Areas and Khyber Pakhtunkhwa province of Pakistan and the state of Borno in Nigeria**. Chronically poor implementation of activities remained a critical challenge in other priority areas, most notably in the state of Kano, Nigeria, and Balochistan province and the city of Karachi in Sindh province, Pakistan. In poliovirus-affected areas of Pakistan and Nigeria an estimated combined total of 530 000 children remained inaccessible for vaccination; in the reinfected area of south-central Somalia more than 500 000 children were inaccessible for polio vaccination.1
6. **The risk of further international spread remains high, particularly in central Africa (especially from Cameroon), the Middle East and the Horn of Africa.** Consequently, the Regional Committee of the Eastern Mediterranean Region at its sixtieth session in October 2013 declared polio transmission an emergency for all Member States of the Region.2 Following the deliberations of the Executive Board at its 134th session, the Director-General convened the Polio Working Group of the Strategic Advisory Group of Experts on immunization (Geneva, 5–6 February 2014) to update WHO's vaccination recommendations for travellers from polio-infected countries. The convening of an Emergency Committee under the International Health Regulations (2005) is planned in advance of the Sixty-seventh World Health Assembly in order to advise the Director-General on measures to limit the international spread of wild poliovirus…
:: OBJECTIVE 2: STRENGTHENING IMMUNIZATION SYSTEMS AND WITHDRAWAL OF ORAL POLIO VACCINE
…9. The Strategic Advisory Group of Experts on immunization finalized its policy recommendations for the administration of inactivated poliovirus vaccine in routine immunization schedules, and endorsed the strategy that was developed for the financing, supply and introduction of inactivated poliovirus vaccine globally.1 The strategy prioritizes the 126 countries that currently use only oral polio vaccine into four tiers, on the basis of the risk of the emergence and spread of circulating vaccine-derived poliovirus type 2; 72% of the strategy's target population is concentrated in the 33 countries of tiers 1 and 2. The strategy combines funding through the GAVI Alliance and expedited processes for the 73 countries eligible for its support with volume purchasing and UNICEF-assisted procurement for other countries in order to obtain the lowest possible prices for inactivated poliovirus vaccine. In February 2014, UNICEF announced a procurement price of €0.75 per dose (about US$ 1 per dose at current exchange rates) of inactivated poliovirus vaccine in 10-dose vials for GAVI-eligible countries and a price of €1.49–2.40 (about US$ 2.04–3.28 at current exchange rates) per dose for middle-income countries. In addition, UNICEF has awarded volumes for five-dose

vials at the price of US$ 1.90 per dose for both low- and middle-income countries, expected to be available from the fourth quarter of 2014. Work continues to develop and license new products and approaches for inactivated poliovirus vaccine, which may contribute to further reductions in the cost of inactivated poliovirus vaccine for the medium-term (that is to say beyond 2018)...

:: OBJECTIVE 3: CONTAINMENT AND CERTIFICATION

… 11. As of 28 February 2014, the South-East Asia Region was on track for certification of polio eradication at end-March 2014. **The Global Commission for the Certification of the Eradication of Poliomyelitis will review data from all six WHO regions in late 2014 or early 2015 to determine whether there is sufficient evidence to conclude formally that wild poliovirus type 2 has been eradicated globally…**

:: OBJECTIVE 4: LEGACY PLANNING

…13. An independent study was conducted on the 22,000 people who are deployed by the Global Polio Eradication Initiative, including the more than 7000 contracted by WHO.1 Senior representatives of national governments, donor agencies and other health initiatives most frequently cited the surveillance (86%), laboratory (50%) and social mobilization (46%) functions performed by this workforce as of potential value for transition to other health initiatives. Two thirds of respondents stated that the future administration of this human resources infrastructure should be the responsibility of national governments…

:: FINANCING AND RESOURCE MANAGEMENT

15. In April 2013, donors and governments of polio-affected countries pledged US$ 4040 million towards the US$ 5530 million budget of the Endgame Plan at the Global Vaccine Summit (Abu Dhabi, 24 and 25 April 2013). A further US$ 490 million has been pledged since then. **In order to operationalize these pledges and mobilize additional funding for the remaining US$ 1000 million gap,** WHO and its Global Polio Eradication Initiative partners have enhanced their resource mobilization and strategic communications capacities and refocused their cross-agency polio advocacy group on intensified resource mobilization. A cross-agency finance working group ensures stronger cost control, accountability and resource management.

16. At the end of November 2013, aggregated requests for financing of eradication activities in 2014 exceeded the budget of US$ 1033 million by US$ 286 million. Reconciling these requests with available financing required a substantial rescheduling of supplementary immunization activities in many countries and allocation of part of the programme's limited discretionary funds for inactivated poliovirus vaccine introduction. **As at 23 January 2014, the cash gap for eradication activities planned for 2014 was still US$ 497.52 million, against the 2014 budget of US$ 1033 million**, requiring intensified efforts to operationalize financing pledges.

:: MAJOR RISKS AND PROGRAMME PRIORITIES FOR 2014

17. **The major risks to eradication are: the bans on immunization campaigns in the North Waziristan agency in Pakistan and parts of southern and central Somalia; the continued targeting of vaccinators in Khyber Pakhtunkhwa province and Karachi in Pakistan; ongoing military operations in Khyber Agency (within the Federally Administered Tribal Areas) of Pakistan; insecurity in Eastern Region, Afghanistan, and Borno state, Nigeria; active conflict in the Syrian Arab Republic; and gaps in programme performance in Kano state, Nigeria, and in the outbreak response performance in Cameroon. These risks are compounded by gaps in polio surveillance and the continued threat of new international spread of wild poliovirus.**

18. Management of these risks requires full national ownership of the eradication programme in all infected countries, with deep engagement of all relevant line ministries and departments, and the holding of local authorities fully accountable for the quality of activities, particularly in accessible areas such as Kano state, Nigeria, and in Cameroon. Accessing and vaccinating children in insecure and conflict-affected areas will in addition require the full engagement of relevant international bodies, religious leaders and humanitarian actors to implement area-specific plans, generate greater community demand and participation, and adapt eradication approaches in line with local contexts. In order to minimize the risks and consequences of international spread of poliovirus, Member States are urged to enhance surveillance and immunization activities and implement fully recommendations for immunization of travellers…

GPEI Update: Polio this week - *As of 26 March 2014*

Global Polio Eradication Initiative

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

[Editor's extract and bolded text]

:: World's most populous region certified polio-free: the WHO South East Asia Region was certified polio-free at a ceremony in India this week, meaning that transmission of wild poliovirus has been interrupted in this bloc of 11 countries stretching from Indonesia to India. This achievement marks a significant leap forward in global eradication, with 80% of the world's population now living in certified polio-free regions.

:: A case of polio due to wild poliovirus type 1 (WPV1) was reported from Iraq this week. This is the first polio case in the country since 2000 and is further evidence of regional spread of the virus. The case, a six-month old boy from Baghdad who had not been immunized, developed paralysis on 10 February 2014. Genetic sequencing indicates the virus is most closely related to virus detected in Syria. WPV1 was also isolated from the child's three-year old sister, who did not develop symptoms. More

:: The GPEI report to the upcoming World Health Assembly in May is now available online. It summarizes the status against each of the four objectives of the Polio Endgame Strategic Plan, and presents an overview of programmatic priorities for the rest of 2014. The full report is available here and above.

Afghanistan

:: A new case of WPV1 was reported this week from Muhmand Dara district in Nangarhar province (previously without wild poliovirus in 2014) with onset of paralysis on 22 February, bringing the total number of WPV1 cases for 2014 to four. The total number of WPV1 cases for 2013 is 14.

Pakistan

:: Seven new WPV1 cases were reported in the past week, five from North Waziristan, Federally Administered Tribal Areas – FATA, one from Bannu, Khyber Pakhtunkhwa (KP), and one from Peshawar, KP, bringing the total number of cases for 2014 to 36. The most recent case had onset of paralysis on 7 March (WPV1 from North Waziristan, Federally Administered Tribal Areas - FATA).

Central Africa

:: Due to continued poliovirus circulation in Cameroon, gaps in surveillance and influx of vulnerable populations from CAR, WHO is elevating the risk assessment of international spread of polio from Cameroon to very high.

:: Since confirmation of the outbreak in Cameroon in October, five nationwide campaigns have been conducted. However, the quality of implementation varied greatly by region, and serious

coverage gaps remain. As many as 40% of children remain under-immunized (with 30% having received zero doses) during SIAs.
:: The recent confirmation of new cases in Cameroon has resulted in planning additional emergency outbreak response activities, including converting a subnational immunization campaign to a full nationwide activity in April 2014, and implementing nationwide campaigns in May and June 2014. Critical to success will be to ensure substantial improvement in the quality campaigns so that all children are reached multiple times with OPV. Equally important will be efforts to rapidly improve the quality of surveillance so that the full extent of the outbreak can be determined and tracked.
:: Immunity levels and surveillance sensitivity are also being assessed in neighbouring countries, in particular in Gabon and the Republic of Congo, and additional immunization activities are being considered in these countries.

Horn of Africa

:: One new WPV1 case was reported in the past week, from Ethiopia. It is the first case in the Horn of Africa in 2014, and had onset of paralysis on 5 January, from Somali region.

Middle East

:: A case of polio due to wild poliovirus type 1 (WPV1) was reported from Iraq last week. This is the first polio case in the country since 2000 and further evidence of regional spread of the virus. The case, a six-month old boy from Baghdad who had not been immunized, developed paralysis on 10 February 2014. Genetic sequencing indicates the virus is most closely related to virus detected in Syria. WPV1 was also isolated from the child's three-year old sister, who did not develop symptoms.
:: In Iraq, since October, two nationwide immunization campaigns and three subnational campaigns have been conducted, achieving overall high quality. Approximately 95% of children were reported to have been reached during each campaign, though coverage has varied by area. WHO and UNICEF estimates from 2012 put routine immunization levels in Iraq at 70%. Routine immunization levels in Baghdad are estimated to be 81%.

Displacement, violence likely cause of Iraq's first polio case in 14 years

IRIN – UNOCHA

Excerpt

DUBAI, 24 March 2014 (IRIN) - Health officials in Iraq are stepping up polio immunization and surveillance following the first confirmed case of the virus in the country in more than a decade.

"It is a huge blow because for 14 years Iraq has been polio free," Syed Jaffar Hussain, head of mission for the World Health Organization (WHO) in Iraq, told IRIN.

WHO's Eastern Mediterranean Region poliovirus laboratory in Egypt and the Centres for Disease Control and Prevention (CDC) in the USA both confirmed the outbreak, detected after a six-month-old baby living on the outskirts of Baghdad became paralysed.

The strain's genetic sequence matches the one found last September in Syria - wild polio virus type 1 (WPV1) - but it is not yet clear how the virus made it to the Iraqi capital or how the boy became infected. His family has no links with Syria or record of recent travel there…

WHO: Poliomyelitis Fact sheet N°114

Updated March 2014

Excerpt

Key facts
:: Polio (poliomyelitis) mainly affects children under 5 years of age.
:: One in 200 infections leads to irreversible paralysis. Among those paralysed, 5% to 10% die when their breathing muscles become immobilized.
:: Polio cases have decreased by over 99% since 1988, from an estimated 350 000 cases then, to 406 reported cases in 2013. The reduction is the result of the global effort to eradicate the disease.
:: In 2014, only 3 countries (Afghanistan, Nigeria and Pakistan) remain polio-endemic, down from more than 125 in 1988.
:: As long as a single child remains infected, children in all countries are at risk of contracting polio. Failure to eradicate polio from these last remaining strongholds could result in as many as 200,000 new cases every year, within 10 years, all over the world.
:: In most countries, the global effort has expanded capacities to tackle other infectious diseases by building effective surveillance and immunization systems.

Cameroon announced the introduction of rotavirus vaccines into its routine immunisation programme with GAVI Alliance support. Rotavirus results in almost 6,000 death of Cameroonian children under five each year. GAVI Deputy CEO Helen Evans said, "Immunisation is one of the best investments that a country can make in the health and well-being of its children. Cameroon's decision to protect its children against severe diarrhoea by vaccinating them against rotavirus will have a strong, positive impact on families and communities across the country."
Joint UNICEF, WHO, GAVI Alliance Media Release: Cameroon to protect its children against leading cause of severe diarrhoea

GAVI Watch [to 29 March 2014]
http://www.gavialliance.org/library/news/press-releases/
:: UK public support for Sport Relief to help vaccinate children in Africa and Asia
Excerpt
London, 23 March 2014 – Children in Africa and Asia are set to benefit from the sporting efforts of thousands of Britons thanks to a generous donation from Sport Relief towards the GAVI Alliance's mission to increase immunisation in the world's poorest countries.
Sport Relief has announced a £3 million pledge to the Alliance for 2014 to support vaccine programmes in the world's poorest countries. This funding will be matched by the Bill & Melinda Gates Foundation through the GAVI Matching Fund, bringing the total to £6 million.
GAVI Alliance Deputy CEO, Helen Evans, said, "The support the GAVI Alliance receives from Sport Relief, thanks to donations from the UK public, makes a tremendous impact in the lives of children living in some of the most difficult circumstances. We are grateful for the continued support of Sport Relief and the generosity of the UK public towards our mission to ensure that children receive vital vaccines no matter where they live."…

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 28 March 2014

:: Ebola haemorrhagic fever in Guinea – update 27 March 2014
:: Middle East respiratory syndrome coronavirus (MERS-CoV) – update 27 March 2014
:: Human infection with avian influenza A(H7N9) virus – update 27 March 2014

WHO: Humanitarian Health Action
http://www.who.int/hac/en/
WHO delivers medical supplies to hard-to-reach areas in north-east Syria
25 March 2014 -- A 78-truck United Nations convoy has delivered humanitarian supplies for thousands of vulnerable and displaced people in the Syrian Arab Republic. Medical supplies included in the convoy and contributed by WHO, will cover the needs of 60 000 people and 1000 surgical interventions. A series of airlifts from Damascus have already delivered medical supplies from WHO for more than 335 000 vulnerable and displaced Syrians.
Read the full story on the WHO medical supplies delivered in the UN convoy

Global Fund: Mozambique Aims to Reach Universal Malaria Protection in 2014
26 March 2014
Excerpt
MAPUTO, Mozambique – The Ministry of Health of Mozambique, together with the Global Fund to Fight AIDS, Tuberculosis and Malaria, World Vision and BHP Billiton Sustainable Communities today announced "a partnership to ensure that every family in Mozambique will be protected from malaria by the end of this year's campaign."
Working towards this goal, the Ministry of Health and World Vision-Mozambique , a Christian relief and development organization, have signed grants for US$85 million with the Global Fund to support malaria prevention, diagnosis and treatment for the next three years. BHP Billiton Sustainable Communities, a registered charity established by the company, has contributed US$10 million to the Global Fund to support these grants…
The grants will fund distribution of long lasting insecticide-treated nets, indoor residual spraying (IRS) in areas not covered by these nets, training of health workers in the diagnosis and treatment of malaria, and community sensitization and mobilization. Partnership development within communities and with civil society will also be supported….
http://www.theglobalfund.org/en/mediacenter/newsreleases/2014-03-26_Mozambique_Aims_to_Reach_Universal_Malaria_Protection_in_2014/

Announcement: PATH receives funding to build new tools in the fight against malaria
PATH said it received £4 million (US$6.5 million) from the United Kingdom's Department for International Development (DFID) to accelerate the development of a point-of-care diagnostic test to improve the management of malaria. PATH's partnership with DFID "focuses on developing an affordable, easy-to-use G6PD diagnostic test that can be administered at the point of care to help achieve safe and effective use of medicines for radical cure of patients infected with *P. vivax*."
Full announcement: http://www.path.org/news/press-room/676/

Aeras Web Tool Highlights Ongoing Impact of Tuberculosis in the United States

March 24, 2014 - The tuberculosis epidemic continues to impact pockets of the U.S. population, according to a data visualization tool developed by the nonprofit biotech, Aeras. Launched on World TB Day, Aeras's TB Crisis Tracker illustrates how the TB epidemic continues to impact the U.S.

Full announcement: http://www.aeras.org/pressreleases/web-tool-highlights-ongoing-impact-of-tuberculosis-in-the-united-states#.UzdazlcWNdc

UNICEF Watch [to 29 March 2014]
http://www.unicef.org/media/media_67204.html
:: Urgent Supplies Reach Remote Areas in South Sudan, with Joint Operation
JUBA, South Sudan, 28 March 2014 – An urgent operation to deliver food, vaccines, nutrition supplements and other vital relief supplies to one of the most isolated areas of conflict-affected South Sudan has begun today, as part of a joint response by the United Nations Children's Fund (UNICEF) and the UN World Food Programme (WFP).
:: UNICEF swiftly responds to Ebola outbreak in Guinea
CONAKRY, Guinea/DAKAR, Senegal, 26 March 2014 – With an Ebola Haemorrhagic Fever (Ebola HF) outbreak declared in the Southern part of Guinea, 11 suspected cases of children infected have been reported, three of whom have died. In an effort to prevent the severe, often-fatal disease from spreading further, UNICEF immediately rushed in aid and delivered health supplies to the most affected areas.

CDC/MMWR Watch [to 29 March 2014]
http://www.cdc.gov/mmwr/mmwr_wk.html
No new relevant content identified.

European Medicines Agency Watch [to 29 March 2014]
http://www.ema.europa.eu/ema/
European Medicines Agency's Management Board endorses revised policy on handling of declarations of interests
The European Medicines Agency's (EMA) Management Board endorsed the Agency's draft revised policy on handling of declarations of interests for scientific-committee members and experts. ... Read more

UN Watch [to 29 March 2014]
Selected meetings, press releases, and press conferences relevant to immunization, vaccines, infectious diseases, global health, etc. http://www.un.org/en/unpress/
No new relevant content.

World Bank/IMF Watch [to 29 March 2014]
Selected media releases and other selected content relevant to immunization, vaccines, infectious diseases, global health, etc. http://www.worldbank.org/en/news/all
No new relevant content.

Industry Watch [to 29 March 2014]
Selected media releases and other selected content from industry.
No new content selected.

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

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

Editor's Note: *We generally do not include – and certainly do not endorse – any commercial market research content. However, we believe it useful to include information on general vaccine market scaling as an environmental dimension impacting policy, access, pricing and other parameters.*

"Global Human Vaccine Industry 2013-2018: Trends, Profits and Forecast Analysis"
Research and Markets (http://www.researchandmarkets.com/research/g6vjj2/global_human)

The global vaccine industry comprises primarily human vaccine production. The annual revenue of this industry is forecast to reach an estimated $41.85 billion by 2018, with good growth over the next five years. Pfizer entered the top five player list in 2012 replacing Wyeth. Sanofi Aventis, Novartis AG, Merck Company, and GlaxoSmithKline are the other players in the top five players list. North America dominates this industry. India and China are rapidly growing as vaccine production hubs with strong domestic demand….

Report: Applying a Health Lens to Decision Making in Non-Health Sectors - Workshop Summary
IOM
March 27, 2014
Overview

Health is influenced by a variety of factors, many of which fall outside the health care delivery sector. These determinants of health include the characteristics of where people live, work, learn, and play. Decision and policy making in areas such as transportation, housing, and education at different levels of government, as well as in the private sector, can have far-reaching impacts on health. There has been increasing dialogue on incorporating a health perspective in policies, programs, and projects outside the health field, including a 2011 IOM report that calls for government and the private sector to adopt approaches that look for shared benefits.

On September 9, 2013, the IOM Roundtable on Population Health Improvement held a workshop to foster cross-sectoral dialogue and to consider the opportunities for and barriers to improving the conditions for health in the course of achieving other sectors' objectives, such as economic development and efficient public transit. This document summarizes the workshop.

Full report: http://www.nap.edu/catalog.php?record_id=18659

Journal Watch

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

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

The American Journal of Bioethics
Volume 14, Issue 3, 2014
http://www.tandfonline.com/toc/uajb20/current
[Reviewed earlier]

American Journal of Infection Control
Vol 42 | No. 4 | April 2014 | Pages 345-464
http://www.ajicjournal.org/current

Barriers and facilitators to influenza vaccination and vaccine coverage in a cohort of health care personnel

Allison L. Naleway, PhD, Emily M. Henkle, PhD, Sarah Ball, ScD, MPH, Sam Bozeman, MPH, Manjusha J. Gaglani, MBBS, Erin D. Kennedy, DVM, MPH, Mark G. Thompson, PhD
http://www.ajicjournal.org/article/S0196-6553%2813%2901361-8/abstract

Abstract

Background

Annual influenza vaccination is recommended for health care personnel (HCP). We describe influenza vaccination coverage among HCP during the 2010-2011 season and present reported facilitators of and barriers to vaccination.

Methods

We enrolled HCP 18 to 65 years of age, working full time, with direct patient contact. Participants completed an Internet-based survey at enrollment and the end of influenza season. In addition to self-reported data, we collected information about the 2010-2011 influenza vaccine from electronic employee health and medical records.

Results

Vaccination coverage was 77% (1,307/1,701). Factors associated with higher vaccination coverage include older age, being married or partnered, working as a physician or dentist, prior history of influenza vaccination, more years in patient care, and higher job satisfaction. Personal protection was reported as the most important reason for vaccination followed closely by convenience, protection of patients, and protection of family and friends. Concerns about perceived vaccine safety and effectiveness and low perceived susceptibility to influenza were the most commonly reported barriers to vaccination. About half of the unvaccinated HCP said they would have been vaccinated if required by their employer.

Conclusion

Influenza vaccination in this cohort was relatively high but still fell short of the recommended target of 90% coverage for HCP. Addressing concerns about vaccine safety and effectiveness are possible areas for future education or intervention to improve coverage among HCP.

American Journal of Preventive Medicine
Vol 46 | No. 4 | April 2014 | Pages 331-432
http://www.ajpmonline.org/current
[No relevant content]

American Journal of Public Health
Volume 104, Issue 4 (April 2014)
http://ajph.aphapublications.org/toc/ajph/current
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
March 2014; 90 (3)
http://www.ajtmh.org/content/current
[Reviewed earlier]

Annals of Internal Medicine
18 March 2014, Vol. 160. No. 6
http://annals.org/issue.aspx
[Reviewed earlier]

BMC Health Services Research
(Accessed 29 March 2014)
http://www.biomedcentral.com/bmchealthservres/content
[No new relevant content]

BMC Public Health
(Accessed 29 March 2014)
http://www.biomedcentral.com/bmcpublichealth/content
Research article
Equity in human papilloma virus vaccination uptake?: sexual behaviour, knowledge and demographics in a cross-sectional study in (un)vaccinated girls in the Netherlands
Madelief Mollers, Karin Lubbers, Symen K Spoelstra, Willibrord CM Weijmar-Schultz, Toos Daemen, Tjalke A Westra, Marianne AB van der Sande, Hans W Nijman, Hester E de Melker, Adriana Tami
BMC Public Health 2014, 14:288 (28 March 2014)
*Abstract (*provisional)
Background

In the Netherlands, human papillomavirus (HPV) vaccination is part of a national program equally accessible for all girls invited for vaccination. To assess possible inequalities in vaccine uptake, we investigated differences between vaccinated and unvaccinated girls with regard to various characteristics, including education and ethnicity, (both associated with non-attendance to the national cervical screening program), sexual behaviour and knowledge of HPV.
Methods
In 2010, 19,939 nationwide randomly-selected 16-17 year-old girls (2009 vaccination campaign) were invited to fill out an online questionnaire. A knowledge scale score and multivariable analyses identified variables associated with vaccination status.
Results
2989 (15%) of the selected girls participated (65% vaccinated, 35% unvaccinated). The participants were comparable with regard to education, ethnicity, most sexual risk behaviour and had similar knowledge scores on HPV transmission and vaccination. However, unvaccinated girls lived in more urbanised areas and were more likely to have a religious background. Irrespective of vaccination status, 81% of the girls were aware of the causal relationship between HPV and cervical cancer, but the awareness of the necessity of cervical screening despite being vaccinated was limited.
Conclusions
HPV vaccine uptake was not associated with knowledge of HPV and with factors that are known to be associated with non-attendance to the cervical cancer screening program in the Netherlands. Furthermore, most sexual behaviour was not related to vaccination status meaning that teenage unvaccinated girls were not at a disproportionally higher risk of being exposed to HPV. Routine HPV vaccination may reduce the social inequity of prevention of cervical cancer.

British Medical Bulletin
Volume 109 Issue 1 March 2014
http://bmb.oxfordjournals.org/content/current
[Reviewed earlier; No relevant content]

British Medical Journal
29 March 2014 (Vol 348, Issue 7951)
http://www.bmj.com/content/348/7951
[No relevant content]

Bulletin of the World Health Organization
Volume 92, Number 3, March 2014, 153-228
http://www.who.int/bulletin/volumes/92/3/en/
[Reviewed earlier]

Clinical Therapeutics
Volume 36, Issue 3, p309-458 March 2014
http://www.clinicaltherapeutics.com/current
[No relevant content]

Cost Effectiveness and Resource Allocation
(Accessed 29 March 2014)
http://www.resource-allocation.com/
[No new relevant content]

Current Opinion in Infectious Diseases
April 2014 - Volume 27 - Issue 2 pp: v-v,115-210
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[No relevant content]

Developing World Bioethics
April 2014 Volume 14, Issue 1 Pages ii–ii, 1–57
http://onlinelibrary.wiley.com/doi/10.1111/dewb.2014.14.issue-1/issuetoc
[Reviewed earlier]

Development in Practice
Volume 23, Issue 8, 2013
http://www.tandfonline.com/toc/cdip20/current
[Reviewed earlier]

Emerging Infectious Diseases
Volume 20, Number 4—April 2014
http://www.cdc.gov/ncidod/EID/index.htm
[Reviewed earlier]

The European Journal of Public Health
Volume 24 Issue 2 April 2014
http://eurpub.oxfordjournals.org/content/current
Editorials
Public health and the Transatlantic trade and investment partnership
Holly Jarman
Department of Health Management and Policy/Center for Law, Ethics, and Health, University of Michigan School of Public Health, Ann Arbor, MI, USA
Correspondence: Holly Jarman, SPH II, 1415 Washington Heights, Ann Arbor, Michigan 48109-2029. Tel: +1-734-647-9225, Fax: +1-734-764-4338, e-mail: hjarman@umich.edu
http://eurpub.oxfordjournals.org/content/24/2/181.extract
Extract
What would you do for an extra €120 billion a year? That's an extra 0.5 % GDP across the European Union (EU), or an extra €545 per household per year.1 If you are a European politician facing poor economic conditions, you might be tempted by an international agreement that promises growth, political capital and campaign finance contributions—all with minimal

pain. The EU is currently negotiating such an agreement with the United States: the Transatlantic Trade and Investment Partnership (TTIP).
Public health advocates should be wary of TTIP, which carries the risk that important public health protections and principles—from access to essential medicines and medical procedures to tobacco control, food and medical device regulation—could be hampered in exchange for the promise of economic gains. To call TTIP a 'trade deal' is to ignore some of its most important features with big consequences for health: regulatory convergence, measures allowing foreign investors to sue governments and strong intellectual …

Vaccine uptake determinants in The Netherlands

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http://eurpub.oxfordjournals.org/content/24/2/304.abstract
Abstract
Background: Combining existing data on background characteristics with data from immunization registers might give insight into determinants of vaccine uptake, which can help to improve communication strategies and invitation policy of National Immunisation Programmes.
Methods: The study population consisted of children born in 2005 as registered in the Dutch national immunization register Præventis. A hierarchical logistic regression model was used to quantify associations between individual vaccination status and proxy variables for ethnic background (individual level), socio-economic status (postcode level) and religious objection to vaccination (municipal level).
Results: Most children whose both parents were not born in The Netherlands had a somewhat lower full vaccine uptake, for example, children whose both parents were born in Turkey [odds ratio = 0.7 (0.6–0.8)] or in Morocco [odds ratio = 0.8 (0.7–0.9)]. The partial uptake was also relatively high (3.7–8.0%) compared with children whose both parents were born in The Netherlands (3.1%). Municipalities with higher religious objection to vaccination and postcode areas with lower socio-economic status were also associated with a lower full uptake.
Conclusions: Despite the high vaccination coverage in The Netherlands, we were able to identify determinants of vaccine uptake by combining existing data sets. This might be an example for other countries. The impact of ethnic background and socio-economic status is not as well known in The Netherlands as the effect of religious objection to vaccination, and deserves more attention. Groups that have a relatively high partial uptake deserve special attention because they do not reject vaccination in general.

Kicking against the pricks: vaccine sceptics have a different social orientation

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http://eurpub.oxfordjournals.org/content/24/2/310.abstract
Abstract
Background: In any country, part of the population is sceptical about the utility of vaccination. To develop successful vaccination programmes, it is important to study and understand the defining characteristics of vaccine sceptics. Research till now mainly focused either on the underlying motives of vaccine refusal, or on socio-demographic differences between vaccine sceptics and non-sceptics. It remained till now unexplored whether both groups differ in terms of basic psychological dispositions. Methods: We held a population survey in a representative sample of the population in Flanders, Belgium (N = 1050), in which we investigated whether respondents' attitude to vaccination was associated with their basic disposition toward other community members or society in general, as measured by the Triandis and Gelfand social orientation scale. Results: We found that sceptics and non-sceptics have a different social orientation, even when several variables are controlled for. More specifically, vaccine sceptics scored significantly lower on both horizontal individualism and horizontal collectivism, indicating a lower disposition to see others as equals. Conclusion: These findings need confirmation in the context of different countries. Such insights can be valuable to optimize the design of effective communication strategies on vaccination programmes.

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Volume 9 / Issue 02 / April 2014
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Articles
Trends in health and health inequalities among major states of India: assessing progress through convergence models
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a2 Professor, Department of Development Studies, International Institute for Population Sciences, Mumbai, Maharashtra, India
Abstract
Convergence in health and health inequalities reflects not only a sense of equity, but also provides a critical assessment tool for monitoring the health progress of differently placed individuals. This study examines convergence hypothesis for health and health inequalities across major Indian states, using both standard and cutting-edge convergence metrics. The findings lend support to the convergence in average health status among the states and the socioeconomic group of India, examined through select health indicators. However, results also suggest a setback in convergence in decline of health inequalities in recent times, particularly in life expectancy at birth, child immunization and underweight. Evidence signals that from the late 1990s, convergence in decline of health inequalities are replaced by emerging divergence. This paper contributes to health policy and planning by identifying areas where, India needs to work to achieve efficiency with equity in health status across geographical divisions and social groups.

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Volume 29 Issue 2 March 2014
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April 2014; 63 (Pt 4)
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The Lancet
Mar 29, 2014 Volume 383 Number 9923 p1099 – 1182 e15
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Early Online Publication, 12 March 2014
Efficacy of a monovalent human-bovine (116E) rotavirus vaccine in Indian infants: a randomised, double-blind, placebo-controlled trial
Nita Bhandari PhD a, Temsunaro Rongsen-Chandola MSc a, Ashish Bavdekar DNB b, Jacob John MD c, Kalpana Antony MBA d, Sunita Taneja PhD a, Nidhi Goyal DPH a, Anand Kawade MD b, Prof Gagandeep Kang PhD c, Sudeep Singh Rathore MBBS a, Sanjay Juvekar PhD b, Prof Jayaprakash Muliyil DrPH c, Alok Arya MPharm a, Hanif Shaikh MPharm b, Vinod Abraham MPH c, Prof Sudhanshu Vrati PhD e, Michael Proschan PhD f, Robert Kohberger PhD g *, Georges Thiry PhD h, Roger Glass PhD f, Prof Harry B Greenberg MD i, George Curlin MD f, Krishna Mohan PhD j, G V J A Harshavardhan BVSc j, Sai Prasad MBA j, T S Rao PhD k, John Boslego MD m, Dr Prof Maharaj Kishan Bhan MD l, for the India Rotavirus Vaccine Group
Summary

Background
Rotavirus is the most common cause of severe dehydrating gastroenteritis in developing countries. Safe, effective, and affordable rotavirus vaccines are needed in these countries. We aimed to assess the efficacy and tolerability of a monovalent human-bovine rotavirus vaccine for severe rotavirus gastroenteritis in low-resource urban and rural settings in India.
Methods
We did a randomised double-blind, placebo-controlled, multicentre trial at three sites in Delhi (urban), Pune (rural), and Vellore (urban and rural) between March 11, 2011, and Nov 5, 2012. Infants aged 6—7 weeks were randomly assigned (2:1), via a central interactive voice or web response system with a block size of 12, to receive either three doses of oral human-bovine natural reassortant vaccine (116E) or placebo at ages 6—7 weeks, 10 weeks, and 14 weeks. Infants' families, study investigators, paediatricians in referral hospitals, laboratory staff, and committee members were all masked to treatment allocation. The primary outcome was incidence of severe rotavirus gastroenteritis (≥11 on the Vesikari scale). Efficacy outcomes and adverse events were ascertained through active surveillance. Analysis was by intention to treat and per protocol. The trial is registered with Clinical Trial Registry—India (CTRI/2010/091/000102) and ClinicalTrials.gov (NCT01305109).
Findings
4532 infants were assigned to receive the 116E vaccine and 2267 to receive placebo, of whom 4354 (96%) and 2187 (96%) infants, respectively, were included in the primary per-protocol efficacy analysis. 71 events of severe rotavirus gastroenteritis were reported in 4752 person-years in infants in the vaccine group compared with 76 events in 2360 person-years in those in the placebo group; vaccine efficacy against severe rotavirus gastroenteritis was 53·6% (95% CI 35·0—66·9; p=0·0013) and 56·4% (36·6—70·1; p<0·0001) in the first year of life. The number of infants needed to be immunised to prevent one severe rotavirus gastroenteritis episode was 55 (95% CI 37—97). The incidence of severe rotavirus gastroenteritis per 100 person-years was 1·5 in the vaccine group and 3·2 in the placebo group, with an incidence rate ratio of 0·46 (95% CI 0·33—0·65). Prevalence of immediate, solicited, and serious adverse events was similar in both groups. One case of urticaria in the vaccine group and one each of acute gastroenteritis and suspected sepsis in the placebo group were regarded as related to the study product. We recorded six cases of intussusception in the vaccine group and two in the placebo group, all of which happened after the third dose. 25 (<1%) infants in the vaccine group and 17 (<1%) in the placebo group died; no death was regarded as related to the study product.
Interpretation
Monovalent human-bovine (116E) rotavirus vaccine is effective and well tolerated in Indian infants.
Funding
Department of Biotechnology and the Biotechnology Industry Research Assistance Council, Government of India; Bill & Melinda Gates Foundation to PATH, USA; Research Council of Norway; UK Department for International Development; National Institutes of Health, Bethesda, USA; and Bharat Biotech International, Hyderabad, India.

Comment

Group B meningococcal vaccine: recommendations for UK use

Andrew J Pollard, Andrew Riordan, Mary Ramsay

Preview |

In the past two decades, meningitis and septicaemia caused by capsular group B Neisseria meningitidis have been responsible for more deaths and severe sequelae among previously healthy young children in the UK than any other infectious disease. The disease poses a

particular challenge for frontline medical staff because it is rare (there are about 600–1400 cases per year in England and Wales1) and the early stages of the disease are indistinguishable from the large number of cases of minor viral infections that present to primary care and emergency services.

Viewpoint

Responding to the Syrian crisis: the needs of women and girls

Samira Sami, Holly A Williams, Sandra Krause, Monica A Onyango, Ann Burton, Barbara Tomczyk

Preview |

Women and girls are disproportionately affected by conflict because of a lack of access to essential services, as learnt from humanitarian crises in recent years.1,2 Poor access to sexual assault treatment and emergency obstetric care can contribute to negative health outcomes.1 In Syria, women and girls are strongly affected by the recent conflict and, according to the UN Population Fund, about 1·7 million women and girls might need access to reproductive health services.3 Because women often have an essential role in postconflict reconstruction, their basic needs should be met so they can emerge from this ongoing crisis as essential stakeholders in the recovery process.

The Lancet Global Health

Apr 2014 Volume 2 Number 4 e182 – 241

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

Editorial

Reaching the unreached and expecting the unexpected

Zoë Mullan

Preview |

March 24 marked annual World TB Day, this year's theme being "reach the 3 million" who acquire tuberculosis every year but who do not get diagnosed, treated, or cured. Why do so many patients with this life-threatening infectious disease go under the radar? One reason, as Madhukar Pai and colleagues point out in a Comment this month, is that many people seek advice on their symptoms from care providers who have little to do with the evidence-based policies and procedures set out by national tuberculosis programmes.

Comment

Why are economic growth and reductions in child undernutrition so weakly correlated—and what can public policy do?

Abhijeet Singh

Preview |

Child undernutrition in developing countries remains a persistent problem. It contributes importantly to child mortality and carries long-term consequences for malnourished children, including reduced cognitive development, worse economic outcomes, and lower offspring birthweight.1 In 2011, an estimated 165 million children in developing countries were stunted and 101 million children were underweight.2

Comment

Disseminating health research in sub-Saharan Africa through journal partnerships

Kai Ruggeri

Preview |

Health research consortia in sub-Saharan Africa present a positive outlook for the region through increased scientific capacity.1 New networks of African–African, African–European, and

African–global partnerships provide platforms to advance crucial research domains.2,3 Such networks enable junior African researchers to advance their work, and they also poise the region to provide expertise across many health domains.2 High-income partners also gain by hosting African researchers, increasing international exposure to developing regions, and learning from researchers with few resources.

Association between economic growth and early childhood undernutrition: evidence from 121 Demographic and Health Surveys from 36 low-income and middle-income countries

Prof Sebastian Vollmer PhD a d, Kenneth Harttgen PhD b, Malavika A Subramanyam DSc c, Jocelyn Finlay PhD d, Prof Stephan Klasen PhD a, Prof S V Subramanian PhD d

http://www.thelancet.com/journals/langlo/article/PIIS2214-109X%2814%2970025-7/abstract

Summary

Background

Economic growth is widely regarded as a necessary, and often sufficient, condition for the improvement of population health. We aimed to assess whether macroeconomic growth was associated with reductions in early childhood undernutrition in low-income and middle-income countries.

Methods

We analysed data from 121 Demographic and Health Surveys from 36 countries done between Jan 1, 1990, and Dec 31, 2011. The sample consisted of nationally representative cross-sectional surveys of children aged 0—35 months, and the outcome variables were stunting, underweight, and wasting. The main independent variable was per-head gross domestic product (GDP) in constant prices and adjusted for purchasing power parity. We used logistic regression models to estimate the association between changes in per-head GDP and changes in child undernutrition outcomes. Models were adjusted for country fixed effects, survey-year fixed effects, clustering, and demographic and socioeconomic covariates for the child, mother, and household.

Findings

Sample sizes were 462 854 for stunting, 485 152 for underweight, and 459 538 for wasting. Overall, 35·6% (95% CI 35·4—35·9) of young children were stunted (ranging from 8·7% [7·6—9·7] in Jordan to 51·1% [49·1—53·1] in Niger), 22·7% (22·5—22·9) were underweight (ranging from 1·8% [1·3—2·3] in Jordan to 41·7% [41·1—42·3] in India), and 12·8% (12·6—12·9) were wasted (ranging from 1·2% [0·6—1·8] in Peru to 28·8% [27·5—30·0] in Burkina Faso). At the country level, no association was seen between average changes in the prevalence of child undernutrition outcomes and average growth of per-head GDP. In models adjusted only for country and survey-year fixed effects, a 5% increase in per-head GDP was associated with an odds ratio (OR) of 0·993 (95% CI 0·989—0·995) for stunting, 0·986 (0·982—0·990) for underweight, and 0·984 (0·981—0·986) for wasting. ORs after adjustment for the full set of covariates were 0·996 (0·993—1·000) for stunting, 0·989 (0·985—0·992) for underweight, and 0·983 (0·979—0·986) for wasting. These findings were consistent across various subsamples and for alternative variable specifications. Notably, no association was seen between per-head GDP and undernutrition in young children from the poorest household wealth quintile. ORs for the poorest wealth quintile were 0·997 (0·990—1·004) for stunting, 0·999 (0·991—1·008) for underweight, and 0·991 (0·978—1·004) for wasting.

Interpretation

A quantitatively very small to null association was seen between increases in per-head GDP and reductions in early childhood undernutrition, emphasising the need for direct health investments to improve the nutritional status of children in low-income and middle-income countries.

Funding
None.

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Editorial

Addressing the global health security agenda
The Lancet Infectious Diseases
Preview |

Pathogens can spread quickly through the globalised system of travel, trade, and food distribution presenting a threat to the entire world. They recognise no borders. "A threat anywhere is a threat everywhere", says Kathleen Sebelius, US Secretary of Health and Human Services. In today's interconnected world, emerging infectious disease threats have created the need for new global solutions such as the International Health Regulations (IHR; 2005), signed by all 194 WHO member states. However, fewer than 20% of countries complied with the 2012 deadline and are fully prepared to detect and respond to disease threats.

Safety and efficacy of the peptide-based therapeutic vaccine for HIV-1, Vacc-4x: a phase 2 randomised, double-blind, placebo-controlled trial
Richard B Pollard, Jürgen K Rockstroh, Giuseppe Pantaleo, David M Asmuth, Barry Peters, Adriano Lazzarin, Felipe Garcia, Kim Ellefsen, Daniel Podzamczer, Jan van Lunzen, Keikawus Arastéh, Dirk Schürmann, Bonaventura Clotet, W David Hardy, Ronald Mitsuyasu, Graeme Moyle, Andreas Plettenberg, Martin Fisher, Gerd Fätkenheuer, Margaret Fischl, Babafemi Taiwo, Ingebjørg Baksaas, Darren Jolliffe, Stefan Persson, Øyvind Jelmert, Arnt-Ove Hovden, Maja A Sommerfelt, Vidar Wendel-Hansen, Birger Sørensen
Preview |

The proportion of participants resuming cART before end of study and change in CD4 counts during the treatment interruption showed no benefit of vaccination. Vacc-4x was safe, well tolerated, immunogenic, seemed to contribute to a viral-load setpoint reduction after cART interruption, and might be worth consideration in future HIV-cure investigative strategies.

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Volume 32, Issue 3, March 2014
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Theme: Health Economic Issues in China
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The Logic of Surveillance Guidelines: An Analysis of Vaccine Adverse Event Reports from an Ontological Perspective
Mélanie Courtot mail, Ryan R. Brinkman, Alan Ruttenberg
Published: March 25, 2014
DOI: 10.1371/journal.pone.0092632
Abstract
Background
When increased rates of adverse events following immunization are detected, regulatory action can be taken by public health agencies. However to be interpreted reports of adverse events must be encoded in a consistent way. Regulatory agencies rely on guidelines to help determine the diagnosis of the adverse events. Manual application of these guidelines is expensive, time consuming, and open to logical errors. Representing these guidelines in a format amenable to automated processing can make this process more efficient.
Methods and Findings
Using the Brighton anaphylaxis case definition, we show that existing clinical guidelines used as standards in pharmacovigilance can be logically encoded using a formal representation such as the Adverse Event Reporting Ontology we developed. We validated the classification of vaccine adverse event reports using the ontology against existing rule-based systems and a manually curated subset of the Vaccine Adverse Event Reporting System. However, we encountered a number of critical issues in the formulation and application of the clinical guidelines. We report these issues and the steps being taken to address them in current surveillance systems, and in the terminological standards in use.
Conclusions
By standardizing and improving the reporting process, we were able to automate diagnosis confirmation. By allowing medical experts to prioritize reports such a system can accelerate the identification of adverse reactions to vaccines and the response of regulatory agencies. This approach of combining ontology and semantic technologies can be used to improve other areas of vaccine adverse event reports analysis and should inform both the design of clinical guidelines and how they are used in the future.

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Progress in tuberculosis vaccine development and host-directed therapies—a state of the art review

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Summary

Tuberculosis continues to kill 1·4 million people annually. During the past 5 years, an alarming increase in the number of patients with multidrug-resistant tuberculosis and extensively drug-resistant tuberculosis has been noted, particularly in eastern Europe, Asia, and southern Africa. Treatment outcomes with available treatment regimens for drug-resistant tuberculosis are poor. Although substantial progress in drug development for tuberculosis has been made, scientific progress towards development of interventions for prevention and improvement of drug treatment outcomes have lagged behind. Innovative interventions are therefore needed to combat the growing pandemic of multidrug-resistant and extensively drug-resistant tuberculosis. Novel adjunct treatments are needed to accomplish improved cure rates for multidrug-resistant and extensively drug-resistant tuberculosis. A novel, safe, widely applicable, and more effective vaccine against tuberculosis is also desperately sought to achieve disease control. The quest to develop a universally protective vaccine for tuberculosis continues. So far, research and development of tuberculosis vaccines has resulted in almost 20 candidates at different stages of the clinical trial pipeline. Host-directed therapies are now being developed to refocus the anti-Mycobacterium tuberculosis-directed immune responses towards the host; a strategy that could be especially beneficial for patients with multidrug-resistant tuberculosis or extensively drug-resistant tuberculosis. As we are running short of canonical tuberculosis drugs, more attention should be given to host-directed preventive and therapeutic intervention measures.

HIV Medicine

Early View

Article first published online: 23 MAR 2014

Original Research

Prevalence of human papillomavirus in men who have sex with men in the era of an effective vaccine; a call to act

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Abstract

Objectives

The incidence of human papillomavirus (HPV)-associated anal cancer is increasing. Men who have sex with men (MSM), particularly those coinfected with HIV, are disproportionately affected. Documenting the molecular epidemiology of HPV infection is important in guiding policy makers in formulating universal and/or targeted vaccine guidelines.

Methods

A prospective cohort study was conducted. HIV-positive and HIV-negative MSM > 18 years old were invited to participate. Provider-performed anal swabs were collected and anal HPV infection was detected using consensus primer solution phase polymerase chain reaction (PCR) followed by type-specific PCR for high-risk (HR)-HPV types 16, 18 and 31. Between-group differences were analysed using $\chi 2$ tests and Wilcoxon rank tests.

Results
One hundred and ninety-four MSM [mean (standard deviation (SD)) age 36 (10) years; 51% HIV-positive) were recruited. The median number of sexual contacts in the preceding 12 months was 4 (interquartile range 2-10). HIV-positive subjects had a mean (SD) CD4 count of 557 (217) cells/μL, and 84% were on highly active antiretroviral therapy (HAART). Thirty-one samples were B-globin negative and thus excluded from further analysis. A total of 113 subjects (69%) had detectable HPV DNA. Sixty-eight subjects (42%) had an HR-HPV type detected. HR HPV type 16 was detected in 44 samples (27%), HR-HPV type 18 in 26 samples (16%) and HR-HPV type 31 in 14 samples (23%). Twenty-eight subjects (17%) had more than one type of HR-HPV type detected. When HPV and HR-HPV were stratified by age, those > 35 years had a higher prevalence ($P = 0.001$ and $P = 0.028$, respectively). HIV-positive subjects were more likely than HIV-negative subjects to have any detectable HPV (77% vs. 61%, respectively; $P = 0.04$), to have HR-HPV type 18 or 31 ($P = 0.05$ and $P = 0.006$, respectively) and to be infected with more than one HR-HPV type (31% vs. 3%, respectively; $P < 0.001$). Within the HIV-positive group, the prevalence of HPV was higher in those not on HAART ($P = 0.041$), although it did not differ when stratified by CD4 count.
Conclusions
The identified prevalence of anal HPV infection was high. Emerging patterns of HPV-related disease strengthen the call for universal vaccination of boys and girls with consideration of catch-up and targeted vaccination of high-risk groups such as MSM and those with HIV infection.

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http://dx.doi.org/10.4172/jaa.1000e116

Addressing the Re-emergence of Poliovirus

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Abstract
Eradicating polio is perhaps the largest worldwide public health initiative in history, and through extensive vaccination efforts, one of the three poliovirus types (poliovirus type 2) has nearly been exterminated while the incidence of polio has declined to the lowest levels ever. Unfortunately, poliovirus has begun to re-emerge in once polio-free countries and new vaccination and therapeutic strategies are being considered. Challenges are many but critical is maintaining good surveillance and sufficient supplies of Oral polio vaccine (OPV), as well as Inactivated polio vaccine (IPV) which ultimately will replace OPV when wild poliovirus transmission has been interrupted. There is a need to develop enhanced polio vaccine cell lines that can increase vaccine titers and production to provide the means lower the cost of vaccine manufacture, to meet worldwide demand, and to address vaccine efficacy by preventing vaccine losses due to 'cold chain' requirements implicit in delivering vaccines to third world nations. In addition, there is a need to develop safe and effective antivirals to address the incidence of OPV 'shedders' and in achieving and maintaining global eradication and containment of poliovirus.

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 29 March 2014
[No new, unique, relevant content]

The Atlantic
http://www.theatlantic.com/magazine/
Accessed 29 March 2014
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 29 March 2014
[No new, unique, relevant content]

Brookings
http://www.brookings.edu/
Accessed 29 March 2014
[No new, unique, relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 29 March 2014
[No new, unique, relevant content]

DEVEX
https://www.devex.com/en/
The benefits of PPPs in global health
By Seth Berkley25 March 2014
Excerpt

If countries are healthier and more prosperous, then we all benefit. After all, global health means economic health.

This is one reason why many governments in wealthier countries have helped fund disease prevention in developing countries, far outside their borders. It's the right thing to do, but it's also smart policy. Global health is a fundamental cornerstone of a vibrant global economy.

In particular, children's health — starting with immunization — has the power to fundamentally change the economic progress of developing countries beyond the basic benefit of saving lives and improving health. Vaccines are a far better value than treating disease. By keeping people healthy, vaccines also help break the cycle of poverty, enabling children to be better nourished and go to school; parents to work more productively; and countries thereby to attract foreign investment that brings trade, infrastructure and technology.

Healthy kids mean healthy families, communities and societies. This makes the economic, education and labor impact of vaccines immense. It is truly a proven, sustainable approach to development. But with government budgets squeezed and many on-the-ground challenges outside of their expertise, governments cannot do this alone. How do we get to the next level? Businesses have the ability to rally the public by providing solutions and applying know-how to problems of any size. One example of this public-private partnership model is my organization, the GAVI Alliance, whose mission is to save children's lives and protect people's health by increasing access to immunization in developing countries. Since 2000, GAVI has helped immunize more than 440 million children and prevent 6 million deaths in the process.

The private sector has become an important partner in this cause. There is a growing corporate awareness that the world's biggest health challenges — including how to reach the 22 million children who go un-vaccinated each year — also have profound economic implications. Vaccine-preventable diseases, such as pneumonia, measles and deadly diarrhea, take an enormous toll on people in developing countries. Companies recognize that their competitiveness and the health of communities where they do business are mutually dependent. We all are stakeholders.

It is imperative that both the public and private sectors work together. Businesses have invested in GAVI because they know that one of the strongest ways to promote global health is through immunization. And quite simply, vaccines provide a strong return on investment…

Economist
http://www.economist.com/
Accessed 29 March 2014
[No new, unique, relevant content]

Financial Times
http://www.ft.com
Accessed 29 March 2014
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 29 March 2014

Foreign Affairs
http://www.foreignaffairs.com/
Accessed 29 March 2014
[No new, unique, relevant content]

Foreign Policy
http://www.foreignpolicy.com/
Accessed 29 March 2014

[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 29 March 2014
WHO's polio-immunization efforts in Syria, Iraq face obstacles
The Guardian (London) (3/28)

The Huffington Post
http://www.huffingtonpost.com/
Accessed 29 March 2014
In Conversation: Paul Farmer on Today's Tuberculosis Emergency and Our Path to Saving Millions of Lives
Ray Chambers
UN Special Envoy for Health Financing

Le Monde
http://www.lemonde.fr/
Accessed 29 March 2014
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 29 March 2014
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
Accessed 29 March 2014
Debate: Making Vaccination Mandatory for All Children
23 March 2014
An outbreak of measles in Manhattan showed that even doctors had overlooked the disease as childhood vaccination became widespread. But over the last decade more people have objected to immunization. Along with the religious exemptions that almost all states allow, 19 states allow exemptions for philosophical reasons. But are broader outbreaks like those in Britain evidence that parents should no longer be allowed to get any exemption from having their children immunized?

Reuters
http://www.reuters.com/
Accessed 29 March 2014
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 29 March 2014
India News
Building Trust With Indian Muslims Key to Polio Fight

Public-Health Officials Are Expected to Declare India Free From an Infectious Scourge
Global health experts long believed that India, with its massive population, poor sanitation and widespread poverty, would be the last country in the world to eradicate polio. On Thursday, however, public-health officials are expected to certify that the South Asian nation is free of the infectious scourge, which has afflicted more than 8,500 Indians since 1998. A critical ingredient in reaching this major public-health milestone: Building trust in Muslim communities. It is a lesson that has been applied to vaccination campaigns in Pakistan, Afghanistan and Nigeria, where polio remains endemic…

Washington Post
http://www.washingtonpost.com/
Accessed 29 March 2014
[No new, unique, relevant content]

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