Center for Vaccine Ethics and Policy
NYU | Wistar Institute | CHOP

Vaccines and Global Health: The Week in Review
31 May 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
David R. Curry, MS
Editor and
Executive Director
Center for Vaccine Ethics & Policy
david.r.curry@centerforvaccineethicsandpolicy.org

Sabin Vaccine Institute: …on the passing of Ciro de Quadros, MD, its Executive Vice President

Thursday, May 29, 2014

Dr. Ciro de Quadros, a public health hero and the Sabin Vaccine Institute's Executive Vice President and Director of Vaccine Advocacy and Education, passed away peacefully yesterday at his home in Washington, DC, surrounded by his family.

:: To learn more about Ciro's life and career, click here.

:: Statements from Sabin's executive leadership team can be found here, and Sabin invites you to share your own memories of Ciro on the Sabin website.

:: Please see additional statements and memoriams here:

Pan American Health Organization (PAHO)
Ministry of Health of Mexico
Ministry of Health of Argentina

CDC/MMWR Watch [to 31 May 2014]
http://www.cdc.gov/mmwr/mmwr_wk.html

CDC Press Release: Measles cases in the United States reach 20-year high
May 29, 2014
CDC urges vaccination as summer travel season approaches

Excerpt

Two hundred and eighty-eight cases of measles were reported to the Centers for Disease Control and Prevention (CDC) in the United States between Jan. 1 and May 23, 2014. This is the largest number of measles cases in the United States reported in the first five months of a year since 1994. Nearly all of the measles cases this year have been associated with international travel by unvaccinated people.

"The current increase in measles cases is being driven by unvaccinated people, primarily U.S. residents, who got measles in other countries, brought the virus back to the United States and spread to others in communities where many people are not vaccinated," said Dr. Anne Schuchat, assistant surgeon general and director of CDC's National Center for Immunizations and Respiratory Diseases. "Many of the clusters in the U.S. began following travel to the Philippines where a large outbreak has been occurring since October 2013."

Of the 288 cases, 280 (97 percent) were associated with importations from at least 18 countries. More than one in seven cases has led to hospitalization. Ninety percent of all measles cases in the United States were in people who were not vaccinated or whose vaccination status was unknown. Among the U.S. residents who were not vaccinated, 85 percent were religious, philosophical or personal reasons…

Polio [to 31 May 2014]

GPEI Update: Polio this week - *As of 28 May 2014*

Global Polio Eradication Initiative

Editor's Excerpt - Full report:
http://www.polioeradication.org/Dataandmonitoring/Poliothisweek.aspx

:: A case of polio due to wild poliovirus type 1 (WPV1) was reported in the past week from Iraq, the second child to be paralyzed by polio in the country since the beginning of the Middle East outbreak last year. Countries are currently implementing the second phase of the regional outbreak response. A targeted mop-up campaign is currently ongoing in the area where the two cases in Iraq were found…

Pakistan

:: One new WPV1 case was reported in the past week from FR Bannu, Federally Administered Tribal Areas (FATA), with onset of paralysis on 2 May. The total number of WPV1 cases reported from Pakistan for 2014 is 67…

Middle East

:: A case of polio due to wild poliovirus type 1 (WPV1) was reported last week from Mada'in district in Baghdad-Resafa province, Iraq, with onset of paralysis on 7 April. This is the second child to be paralyzed by polio in the country since the beginning of the Middle East outbreak last year. A targeted mop-up campaign is currently ongoing in the area where the two cases in Iraq were found.

:: The total number of WPV1 cases reported from the Middle East is 38. In Syria, 36 cases are reported (35 in 2013 and 1 in 2014) with the most recent date of onset of paralyses on 21 January…

WHO: Global Alert and Response (GAR) – *Disease Outbreak News* [to 31 May 2014]

http://www.who.int/csr/don/en/

:: Ebola virus disease, West Africa – update 30 May 2014

:: Cholera outbreak, South Sudan 30 May 2014

:: Ebola virus disease, West Africa – update 28 May 2014
:: Middle East respiratory syndrome coronavirus (MERS-CoV) – update 28 May 2014

GAVI Watch [to 31 May 2014]
http://www.gavialliance.org/library/news/press-releases/
:: Latest News: UN Secretary-General champions GAVI's life-saving mission
Ban Ki-moon emphasizes investment in vaccines as key to achieving UN Millennium Development Goals
Excerpt
Toronto, Canada, 30 May 2014 - UN Secretary-General Ban Ki-moon has agreed to become a champion of the GAVI Alliance, supporting its mission to save children's lives and protect people's health by increasing access to immunisation.
He made the announcement during the high-level summit "Saving Every Woman, Every Child: Within Arm's Reach," emphasising his commitment to women and children's health globally.
"I am proud to support the GAVI Alliance," said Secretary-General Ban Ki-moon. "Immunisation continues to be an essential tool in moving us toward the UN Millennium Development Goals. An investment in immunisation is an investment in the health of all the world's children, in our collective future. A successful replenishment of the GAVI Alliance is critical to the efforts of the Every Woman Every Child movement to improve the health of women and children around the world."…

UNICEF Watch [to 31 May 2014]
http://www.unicef.org/media/media_71724.html
:: UNICEF, UNFPA stand behind Africa's biggest anti child marriage push
ADDIS ABABA, Ethiopia, 29 May 2014 – UNICEF and the United Nations Population Fund (UNFPA) welcomed the first African Union campaign to end child marriage launched in Addis Ababa today.
:: Preventing newborn deaths must be a global priority: UNICEF
TORONTO, 29 May 2014 - Every minute, 10 babies die or are stillborn across the world, a staggering 5.5 million lives ended every year just as they start. The majority of those deaths are from preventable causes, including prematurity, childbirth complications and newborn infections.

WHO: Humanitarian Health Action [to 31 May 2014]
http://www.who.int/hac/en/
WHO helps bring medical supplies to besieged Syrian town of Douma for first time in 18 months
Excerpt
28 May 2014
WHO has helped to bring life-saving medicines and medical supplies to thousands of people in the besieged Syrian town of Douma for the first time in 18 months.
Two WHO trucks loaded with urgently needed supplies to support the Syrian Arab Red Crescent and the local health authorities reached the town in the East Ghouta area on Saturday as part of a UN inter-agency convoy.

It was the first time medical help had reached Douma since the siege of the area began in November 2012….

The **Weekly Epidemiological Record (WER) for 30 May 2014**, vol. 89, 22 (pp. 237–244) includes:
:: Progress towards polio eradication worldwide, 2013–2014
:: Anticipating epidemics
http://www.who.int/entity/wer/2014/wer8922.pdf?ua=1

WHO: New guidelines for planning and developing cancer registries
27 May 2014
The International Agency for Research on Cancer (IARC), WHO and the International Association of Cancer Registries (IACR) launched new guidelines for establishing cancer registries.
The publication, titled "Planning and developing population-based cancer registration in low- and middle-income settings", provides essential guidance on the key steps in planning a registry, including accessing sources of information, monitoring the quality of the data, and reporting results.
Read the news release on new guidelines for developing cancer registries

Media Release: PATH Malaria Vaccine Initiative Names New Director of Research & Development
Excerpt
WASHINGTON, May 29, 2014 /PRNewswire-USNewswire/ -- The PATH Malaria Vaccine Initiative (MVI) announced today that C. Richter (Rick) King, PhD, has been named Director of Research & Development (R&D). MVI drives the development of safe and effective vaccines to combat malaria. Malaria still kills more than 600,000 people worldwide, and half the world's population remains at risk of contracting the disease.
Dr. King is an accomplished scientist with more than 25 years of experience in the public and private sectors, in both for-profit and nonprofit organizations. Most recently he served as Vice President of Vaccine Design for the International AIDS Vaccine Initiative (IAVI), within their Vaccine Design & Development Laboratory, a role he held for five years…
…Dr. King will lead work around transmission-blocking vaccines, a priority area of product development for MVI. He will also guide MVI's portfolio of evaluation technology projects, which aim to refine or develop ways to assess vaccine efficacy prior to large-scale field trials…
…"Advancing new treatments and preventions have been a life-long passion," said Dr. King, "and I am excited to be on the cutting edge of the malaria vaccine development field. I can't wait to get started."…

European Medicines Agency Watch [to 31 May 2014]
http://www.ema.europa.eu/ema/
European Medicines Agency welcomes publication of the Clinical Trials Regulation
28/05/2014
Excerpt

The European Medicines Agency (EMA) welcomes the publication of the Clinical Trials Regulation in the Official Journal of the European Union (EU). This legislation will open up a new era for the conduct of clinical trials in the EU, ensuring that Europe remains an attractive centre for clinical research. This will foster European competitiveness and innovative capacity, and facilitate swifter development of new medicines for patients. In addition to simplifying clinical trial approvals, the Regulation foresees transparency on the conduct of trials in the European Economic Area, from the point of their authorisation to the publication of the results of those clinical trials.

Whilst authorisation and oversight of clinical trials remains the competence of Member States, the new legislation mandates the Agency to prepare the IT platforms to support sponsors and experts in the Member States in carrying out their roles in relation to the authorisation of trials, their supervision, safety reporting and compliance activities, as well as to enable public access to information on clinical trials.

EMA policy on publication and access to clinical trial data

The new Regulation provides for the first time a direct legal basis for the release of clinical trial results. This is directly in line with the Agency's commitment to increased transparency of these data, through its draft policy on proactive publication and access to clinical trial data. This policy, currently in the process of being finalised, will provide a bridge until the new legislation comes into force, which can be no earlier than mid-2016.

Global Fund Watch [to 31 May 2014]
http://www.theglobalfund.org/en/mediacenter/announcements/
No new relevant content identified.

UN Watch [to 31 May 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 identified.

World Bank/IMF Watch [to 31 May 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 identified.

Industry Watch [to 31 May 2014]
Selected media releases and other selected content from industry.

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

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

Summit: Saving Every Woman and Every Child – Within Arm's Reach
Government of Canada
28-30 May 2014
Toronto, Canada
Overview

The Summit will focus on reducing the preventable deaths of newborns, mothers and children under the age of five in developing countries. It will bring together global leaders and Canadian experts to galvanize support for the next phase of efforts and ensure that maternal, newborn and child health remains a global priority.

Canada is a world leader in the global effort to reduce maternal and child mortality, and improve the health of mothers and children in the world's poorest countries. As part of the G8 Muskoka Initiative, Canada is providing $2.85 billion in funding between 2010 and 2015 to improve the health and save the lives of women and children in developing countries.

The Summit will build consensus on how to scale-up progress on maternal, newborn and child health. The critical issues include:
:: accelerating progress on maternal health
:: reducing newborn mortality
:: saving lives through immunization
:: scaling up nutrition as a foundation for healthy lives
:: building civil registration and vital statistics systems
:: building new partnerships with the private sector to leverage innovation and financing

WHO: Sixty-seventh World Health Assembly [WHA]
[Editor's Note: The Sixty-seventh World Health Assembly concluded on Saturday, 31 May. Key interviews, video, the WHA Journal and all documentation available here: http://www.who.int/mediacentre/events/2014/wha67/en/.
News release: World Health Assembly closes

24 May 2014 | GENEVA - The Sixty-seventh World Health Assembly closed today, after adopting more than 20 resolutions on public health issues of global importance.

"This has been an intense Health Assembly, with a record-breaking number of agenda items, documents and resolutions, and nearly 3,500 registered delegates," said Dr Margaret Chan, WHO's Director-General. "This is a reflection of the growing number of complexity of health issues, and your deep interest in addressing them."

A number of the Health Assembly resolutions were approved today on the following issues.

:: Antimicrobial drug resistance

The delegates recognized their growing concern of antimicrobial resistance and urged governments to strengthen national action and international collaboration. This requires sharing information on the extent of resistance and the use of antibiotics in humans and animals. It also involves improving awareness among health providers and the public of the threat posed by resistance, the need for responsible use of antibiotics, and the importance of good hand hygiene and other measures to prevent infections.

The resolution urges Member States to strengthen drug management systems, to support research to extend the lifespan of existing drugs, and to encourage the development of new diagnostics and treatment options.

As requested in the resolution, WHO will develop a draft global action plan to combat antimicrobial resistance, including antibiotic resistance for presentation to the World Health Assembly for approval next year.

:: Implementation of the International Health Regulations (2005)

Yellow fever is a disease specified in the International Health Regulations (2005) for which countries may require proof of vaccination from travellers as a condition of entry under certain circumstances, and may take certain measures if an arriving traveller does not have this certificate in his possession.

The Health Assembly adopted revised provisions on yellow fever vaccination or revaccination under the International Health Regulations (2005). These include extending the validity of a certificate of vaccination against yellow fever from 10 years to the extent of the life of the vaccinated person. The revised provisions are based on the recommendations of the Strategic Advisory Group of Experts (SAGE) on immunization following its scientific review and analysis of evidence.

Member States reaffirmed their strong and continuous commitment to the implementation of International Health Regulations (2005).

:: Public health impacts of exposure to mercury and mercury compounds: the role of WHO and ministries of public health in the implementation of the Minamata Convention

The World Health Assembly requested the WHO Secretariat provide expert advice to help health ministries implement the Minamata Convention on Mercury. Most mercury is released as a result of human activity, such as burning coal and waste and mining for mercury, gold and other metals. WHO considers mercury one of the top ten chemicals or groups of chemicals of major public health concern.

The 2013 Minamata Convention aims to "protect human health and the environment from anthropogenic emissions and releases of mercury and mercury compounds". The legally binding convention will enter into force when 50 countries have ratified it. It encourages countries to identify and better protect people who are at particular risk from mercury and highlights the need to provide effective health services for everyone who has been affected by exposed to mercury.

:: Addressing the global challenge of violence, in particular against women and girls

Across the world, each year, nearly 1.4 million people lose their lives to violence. Women and girls experience specific forms of violence that are often hidden. Globally, 1 in 3 women experience physical and/or sexual violence at least once in her life. For every person who dies as a result of violence, many more are injured and suffer from a range of adverse physical and mental health outcomes.

Member States will work to strengthen the role of the health system in addressing violence. WHO will develop a global plan of action to strengthen the role of national health systems within a multi-sectoral response to address interpersonal violence, in particular against women and girls, and against children.

:: Follow up of the Recife Political Declaration on Human Resources for Health: renewed commitments towards universal health coverage

The Recife Political Declaration was formulated and adopted by participants of the Third Global Forum on Human Resources for Health, in November 2013. Rooted in the right to health approach, the Recife Declaration recognizes the centrality of human resources for health in the drive towards universal health coverage. It commits governments to creating the conditions for the inclusive development of a shared vision with other stakeholders and reaffirms the role of

the WHO Global Code of Practice on the International Recruitment of Health Personnel as a guide for action to strengthen the health workforce and health systems.

:: Follow-up of the report of the Consultative Expert Working Group on Research and Development: Financing and Coordination

The Heath Assembly approved a resolution that significantly advances the quest for innovative, sustainable solutions for financing and coordinating health research and development (R&D) for diseases that disproportionately affect developing countries. The decision provides a firm go-ahead on the implementation of innovative health R&D demonstration projects.

By virtue of this decision, WHO will take the first steps to establish at the Special Programme for Research and Training in Tropical Diseases (TDR) a pooled fund for voluntary contributions towards R&D for diseases of the poor. WHO Member States have emphasised the importance of inclusive coordination of these new developments.

:: Access to essential medicines

WHO's strategy to help countries improve access to essential medicines was approved. Key principles include selecting a limited range of medicines on the basis of the best evidence available, efficient procurement, affordable prices, effective distribution systems, and rational use. The WHO Essential medicines list was recognized as a valuable tool that enables countries to identify a core set of medicines which need to be available to provide quality medical care.

:: Regulatory system strengthening

Effective medicines regulation ensures that medicines and medical products are of the required quality, safety and efficacy; medicines are appropriately manufactured, stored, distributed and dispensed; illegal manufacturing and trade is controlled and prevented; health professionals and patients have the necessary information to enable them to use medicines rationally; promotion and advertising is regulated and fair; and access to medicines is not hindered by unjustified regulatory work.

In order to improve the regulation of medical products globally and ensure that medical products are of assured quality, more emphasis needs to be placed on regulatory strengthening, and promoting collaboration in regulatory systems.

The WHA mandated WHO, in cooperation with national regulators, to continue its important role globally in medicines regulation through establishing necessary norms and standards, supporting regulatory capacity-building and strengthening safety monitoring programmes. Through its Prequalification programme, WHO is requested to continue to ensures the quality, safety and efficacy of selected priority essential medicines, diagnostics and vaccines. A new development endorsed by Member States is the future progressive transition of prequalification to networks of strengthened regulatory authorities.

:: Health intervention and technology assessment in support of universal health coverage

Many countries currently lack the capacity to assess the merits of health technology. Health technology assessment (HTA) involves systematically evaluating the properties, effects, and/or impacts of different health technologies. Its main purpose is to inform technology-related policy-making in health care, and thus improve the uptake of cost-effective new technologies and prevent the uptake of technologies that are of doubtful value for the health system. Wasteful spending on medicines and other technologies has been identified as a major cause of inefficiencies in health service delivery.

Following the adoption of a resolution on HTA at the Health Assembly, WHO will support capacity-building for health technology assessment in countries. It will provide tools and

guidance to prioritize health technologies and intensify networking and information exchange among countries to support priority setting.

:: Health in the post-2015 development agenda

Member States approved a resolution on health in the post-2015 development agenda, stressing the need for ongoing engagement in the process of setting the agenda. This includes a need to complete the unfinished work of the health Millennium Development Goals, newborn health, as well as an increased focus on noncommunicable diseases, mental health and neglected tropical diseases. The resolution also stresses the importance of universal health coverage and the need to strengthen health systems.

Accountability through regular assessment of progress by strengthening civil registration, vital statistics and health information systems are crucial. Member States emphasized the importance of having health at the core of the post-2015 development agenda.

:: Newborn health: draft action plan

The first-ever global plan to end preventable newborn deaths and stillbirths by 2035 calls for all countries to aim for fewer than 10 newborn deaths per 1000 live births and less than 10 stillbirths per 1000 total births by 2035.

Every year almost 3 million babies die in the first month of life and 2.6 million babies are stillborn (die in the last 3 months of pregnancy or during childbirth). Most of these deaths could be prevented by cost-effective interventions.

The Plan's goals will require every country to invest in high-quality care before, during and after childbirth for every pregnant woman and newborn and highlights the urgent need to record all births and deaths.

SUMMARY OF THE SESSION: GLOBAL VACCINE ACTION PLAN, ITEM 12.2

WHO 67th WORLD HEALTH ASSEMBLY

Geneva, 21st May 2014

Fifty-four speakers including 50 representatives from Member States[1], one observer[2], civil society organizations[3] and the GAVI Alliance took the floor during the discussion on the Global Vaccine Action Plan (GVAP).

Delegates commended the Strategic Advisory Group of Experts (SAGE) on immunization for an excellent assessment report[4] and took note of the recommendations, particularly on the need to improve data quality.

While Member States acknowledged WHO's fundamental role in facilitating the rollout of the GVAP, they also highlighted the need for all stakeholders, particularly national governments to play a leading role in making the needed investments in immunization and in monitoring programme performance.

Delegates highlighted several issues that must be addressed if the global immunization goals are to be achieved including:

:: Sustainable access to vaccines — especially the newer vaccines — at affordable prices for all countries, especially the middle-income countries who are not eligible for funding support from the GAVI Alliance;

:: Technology transfer to facilitate local manufacture of vaccines as a means of ensuring vaccine security;

:: Guidance to improve data quality including the use of new technologies like electronic registries;

:: Assistance on risk communication and management to address misinformation in some countries and communities on the need for immunization and its impact on vaccination coverage; and

:: Support countries to review the evidence and conduct economic analysis leading to informed decisions based on local priorities and needs.

In its response, the WHO secretariat, while taking note of all the issues raised by the delegates also reminded the Assembly that the GVAP progress report indicated that the world was not on track to achieve some of the key immunization goals for the decade and urged for more concerted action by all immunization stakeholders.

[1] Brazil; Cote d'Ivoire; Jamaica; Malaysia; Bahrain; Colombia; Thailand; Lebanon; Republic of Korea; China; Ecuador; Burundi; Indonesia; Japan; Vietnam; Russia; Iraq; Kenya; Surinam; Congo; Oman; Spain; Togo; Mexico; Namibia; Maldives; Morocco; South Africa; Germany; Mongolia; Algeria; Iran; India; Egypt; Barbados; Burkina-Faso; Jordan; Costa Rica; UAE; Uruguay; Tunisia; USA; Ethiopia; Trinidad-Tobago; Grenada; Azerbaijan; Malawi; Libya; Argentina; Tanzania.

[2] Taipei

[3] International Pharmacists Federation and MSF

[4] WHA 67, Document A67/12, http://apps.who.int/gb/ebwha/pdf_files/WHA67/A67_12-en.pdf

WHA 67 - Selected Documentation

A67/6 - Framework of engagement with non-State actors
A67/11 - Draft global strategy and targets for tuberculosis prevention, care and control after 201
A67/12 - Global vaccine action plan
A67/15 A67/15 Add.1 - Maternal, infant and young child nutrition
A67/16 – Disability: Draft WHO global disability action plan 2014–2021: Better health for all people with disability
A67/19 - Monitoring the achievement of the health-related Millennium Development Goals
A67/20 - Monitoring the achievement of the health-related Millennium Development Goals
A67/21 A67/21 Corr.1 - Newborn health: draft action plan/ Every newborn: an action plan to end preventable deaths
A67/22 - Addressing the global challenge of violence in particular against women and girls
A67/23 - Multisectoral action for a life course approach to healthy ageing
A67/30 - Access to essential medicines
A67/33 - Health intervention and technology assessment in support of universal health coverage
A67/33 - Health intervention and technology assessment in support of universal health coverage
A67/34 - Follow-up of the Recife Political Declaration on Human Resources for Health: renewed commitments towards universal health coverage
A67/35 A67/35 Add.1 - Implementation of the International Health Regulations (2005)
A67/36 A67/36 Add.1 - Pandemic Influenza Preparedness: sharing of influenza viruses and access to vaccines and other benefits
A67/37 - Smallpox eradication: destruction of variola virus stocks
A67/38 - Poliomyelitis: intensification of the global eradication initiative
A67/39 - Antimicrobial drug resistance
A67/39 Add.1 - Draft global action plan on antimicrobial resistance
Resolution: WHA67.1
Global strategy and targets for tuberculosis prevention, care and control after 2015

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 6, 2014
http://www.tandfonline.com/toc/uajb20/current
[Reviewed earlier]

American Journal of Infection Control
Vol 42 | No. 6 | June 2014 | Pages 585-696
http://www.ajicjournal.org/current

Understanding health care personnel's attitudes toward mandatory influenza vaccination

Reda A. Awali, MD, MPH, Preethy S. Samuel, PhD, Bharat Marwaha, MD, Nazir Ahmad, MD, Puneet Gupta, MBBS, Vinod Kumar, MBBS, Joseph Ellsworth, BS, Elaine Flanagan, BSN, MSA, Mark Upfal, MD, Jim Russell, RN, BSN, Carol Kaplan, BS, Keith S. Kaye, MD, MPH, Teena Chopra, MD, MPH

Abstract

Background

This study investigated the factors influencing influenza vaccination rates among health care personnel (HCP) and explored HCP's attitudes toward a policy of mandatory vaccination.

Methods

In September 2012, a 33-item Web-based questionnaire was administered to 3,054 HCP employed at a tertiary care hospital in metropolitan Detroit.

Results

There was a significant increase in the rate of influenza vaccination, from 80% in the 2010-2011 influenza season (before the mandated influenza vaccine) to 93% in 2011-2012 (after the mandate) ($P < .0001$). Logistic regression showed that HCP with a history of previous influenza vaccination were 7 times more likely than their peers without this history to receive the vaccine in 2011-2012. A pro-mandate attitude toward influenza vaccination was a significant predictor of receiving the vaccine after adjusting for demographics, history of previous vaccination, awareness of the hospital's mandatory vaccination policy, and patient contact while providing care ($P = .01$).

Conclusions

The increased rate of influenza vaccination among HCP was driven by both an awareness of the mandatory policy and a pro-mandate attitude toward vaccination. The findings of this study call for better education of HCP on the influenza vaccine along with enforcement of a mandatory vaccination policy.

American Journal of Preventive Medicine
Volume 46, Issue 6, p543-660, e53-e60 June 2014
http://www.ajpmonline.org/current
[Reviewed earlier]

American Journal of Public Health
Volume 104, Issue S3 (June 2014)
http://ajph.aphapublications.org/toc/ajph/current
Issue Focus: Health of American Indians and Alaska Natives
[Reviewed earlier]

American Journal of Tropical Medicine and Hygiene
May 2014; 90 (5)
http://www.ajtmh.org/content/current
[Reviewed earlier]

Annals of Internal Medicine
20 May 2014, Vol. 160. No. 10
http://annals.org/issue.aspx
[Reviewed earlier]

BMC Health Services Research
(Accessed 31 May 2014)
http://www.biomedcentral.com/bmchealthservres/content
[No new relevant content]

BMC Public Health
(Accessed 31 May 2014)
http://www.biomedcentral.com/bmcpublichealth/content
Research article
School nurses' attitudes and experiences regarding the human papillomavirus vaccination programme in Sweden: a population-based survey
Maria Grandahl, Tanja Tydén, Andreas Rosenblad, Marie Oscarsson, Tryggve Nevéus and Christina Stenhammar
Author Affiliations
BMC Public Health 2014, 14:540 doi:10.1186/1471-2458-14-540
Published: 31 May 2014
Abstract (provisional)
Background
Sweden introduced a school-based human papillomavirus (HPV) vaccination programme in 2012, and school nurses are responsible for managing the vaccinations. The aim of the present

study was to investigate the attitudes and experiences of school nurses regarding the school-based HPV vaccination programme 1 year after its implementation.
Methods
Data were collected using a web-based questionnaire in the spring of 2013, and 83.1% (851/1024) of nurses responded.
Results
There were strong associations between the nurses' education about the HPV vaccine and their perceived knowledge about the vaccine and a favourable attitude towards vaccination (both $p < 0.001$). School nurses who received a high level of education were more likely to have a positive attitude to HPV vaccination compared with nurses with little education about HPV vaccination (adjusted odds ratio [OR] = 9.8; 95% confidence interval [CI]:3.797-25.132). Nurses with high perceived knowledge were more likely to have a positive attitude compared with those with a low level of perceived knowledge (OR = 2.5; 95% CI: 1.299-4.955). If financial support from the government was used to fund an additional school nurse, nurses were more likely to have a positive attitude than if the financial support was not used to cover the extra expenses incurred by the HPV vaccination (OR = 2.1; 95% CI:1.051-4.010). The majority, 648 (76.1%), had been contacted by parents with questions about the vaccine, mostly related to adverse effects. In addition, 570 (66.9%) stated that they had experienced difficulties with the vaccinations, and 337 (59.1%) of these considered the task to be time-consuming.
Conclusions
A high level of education and perceived good knowledge about HPV are associated with a positive attitude of school nurses to the HPV vaccination programme. Thus, nurses require adequate knowledge, education, skills and time to address the questions and concerns of parents, as well as providing information about HPV. Strategic financial support is required because HPV vaccination is a complex and time-consuming task.

Research article

HIV vaccine acceptability among high-risk drug users in Appalachia: a cross-sectional study

April M Young, Ralph J DiClemente, Daniel S Halgin, Claire E Sterk and Jennifer R Havens
Author Affiliations
BMC Public Health 2014, 14:537 doi:10.1186/1471-2458-14-537
Published: 30 May 2014
Abstract (provisional)
Background
A vaccine could substantially impact the HIV epidemic, but inadequate uptake is a serious concern. Unfortunately, people who use drugs, particularly those residing in rural communities, have been underrepresented in previous research on HIV vaccine acceptability. This study examined HIV vaccine acceptability among high-risk drug users in a rural community in the United States.
Methods
Interviewer-administered questionnaires included questions about risk behavior and attitudes toward HIV vaccination from 433 HIV-negative drug users (76% with history of injection) enrolled in a cohort study in Central Appalachia. HIV vaccine acceptability was measured on a 4-point Likert scale. Generalized linear mixed models were used to determine correlates to self-report of being "very likely" to receive a 90% effective HIV vaccine (i.e. "maximum vaccine acceptability", or MVA). Adjusted odds ratios (AORs) and corresponding 95% confidence intervals (CIs) are reported.
Results

Most (91%) reported that they would accept a preventive HIV vaccine, but concerns about cost, dosing, transportation constraints, vaccine-induced seropositivity, and confidentiality were expressed. Cash incentives, oral-administration, and peer/partner encouragement were anticipated facilitators of uptake. In multivariate analysis, men were significantly less likely to report MVA (AOR: 0.33, CI: 0.21 - 0.52). MVA was more common among participants who believed that they were susceptible to HIV (AOR: 2.31, CI: 1.28 - 4.07), that an HIV vaccine would benefit them (AOR: 2.80, CI: 1.70 - 4.64), and who had positive experiential attitudes toward HIV vaccination (AOR: 1.85, CI: 1.08 - 3.17). MVA was also more common among participants who believed that others would encourage them to get vaccinated and anticipated that their behavior would be influenced by others' encouragement (AOR: 1.81, 95% 1.09 - 3.01).
Conclusions
To our knowledge, this study was among the first to explore and provide evidence for feasibility of HIV vaccination in a rural, high-risk population in the United States. This study provides preliminary evidence that gender-specific targeting in vaccine promotion may be necessary to promoting vaccine uptake in this setting, particularly among men. The data also underscore the importance of addressing perceived risks and benefits, social norms, and logistical constraints in efforts to achieve widespread vaccine coverage in this high-risk population.

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

British Medical Journal
31 May 2014 (Vol 348, Issue 7960)
http://www.bmj.com/content/348/7960
[No relevant conent]

Bulletin of the World Health Organization
Volume 92, Number 5, May 2014, 309-384
http://www.who.int/bulletin/volumes/92/5/en/
[Reviewed earlier]

Clinical Infectious Diseases (CID)
Volume 58 Issue 11 June 1, 2014
http://cid.oxfordjournals.org/content/current
[Reviewed earlier]

Clinical Therapeutics
Volume 36, Issue 5, p613-816 May 2014
http://www.clinicaltherapeutics.com/current
[Reviewed earlier]

Cost Effectiveness and Resource Allocation
(Accessed 31 May 2014)
http://www.resource-allocation.com/
[No new relevant content]

Current Opinion in Infectious Diseases
June 2014 - Volume 27 - Issue 3 pp: v-v 211-302
http://journals.lww.com/co-infectiousdiseases/pages/currenttoc.aspx
[Reviewed earlier]

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 24, Issue 2, 2014
http://www.tandfonline.com/toc/cdip20/current
"Perennial issues Around agriculture, rural development and related water management…"
[No relevant content]

Emerging Infectious Diseases
Volume 20, Number 6—June 2014
http://www.cdc.gov/ncidod/EID/index.htm
[Reviewed earlier]

The European Journal of Public Health
Volume 24 Issue 3 June 2014
http://eurpub.oxfordjournals.org/content/current
[Reviewed earlier]

Eurosurveillance
Volume 19, Issue 21, 29 May 2014
http://www.eurosurveillance.org/Public/Articles/Archives.aspx?PublicationId=11678
Rapid communications
Middle East respiratory syndrome coronavirus (MERS-CoV) infections in two returning travellers in the Netherlands, May 2014
M Kraaij – Dirkzwager1, A Timen1, K Dirksen2, L Gelinck3, E Leyten3, P Groeneveld4, C Jansen3, M Jonges5, S Raj6, I Thurkow7, R van Gageldonk-Lafeber8, A van der Eijk6, M Koopmans5,6, on behalf of the MERS-CoV outbreak investigation team of the Netherlands9

National Institute for Public Health and the Environment (RIVM) National Coordination Centre for Communicable Disease Control, Bilthoven, the Netherlands
Public Health Service The Hague, The Hague, the Netherlands
Medical Centre Haaglanden, The Hague, the Netherlands
Isala Klinieken Zwolle, Zwolle, the Netherlands
National Institute for Public Health and the Environment (RIVM) Centre for Infectious Disease Research, Diagnostics and Screening, Bilthoven, the Netherlands
Erasmus MC, Rotterdam, the Netherlands
Public Health Service Ijsselland, Zwolle, the Netherlands
National Institute for Public Health and the Environment (RIVM), Centre for Infectious Diseases, Epidemiology and Surveillance, Bilthoven, the Netherlands
Summary
Two patients, returning to the Netherlands from pilgrimage in Medina and Mecca, Kingdom of Saudi Arabia, were diagnosed with Middle East respiratory syndrome coronavirus (MERS-CoV) infection in May 2014. The source and mode of transmission have not yet been determined. Hospital-acquired infection and community-acquired infection are both possible.

Global Health: Science and Practice (GHSP)
May 2014 | Volume 2 | Issue 2
http://www.ghspjournal.org/content/current
[No relevant content]

Globalization and Health
[Accessed 31 May 2014]
http://www.globalizationandhealth.com/
Research
Scaling up antiretroviral treatment and improving patient retention in care: lessons from Ethiopia, 2005-2013
Yibeltal Assefa, Achamyeleh Alebachew, Meskele Lera, Lut Lynen, Edwin Wouters and Wim Van Damme
Abstract (provisional)
Background
Antiretroviral treatment (ART) was provided to more than nine million people by the end of 2012. Although ART programs in resource-limited settings have expanded treatment, inadequate retention in care has been a challenge. Ethiopia has been scaling up ART and improving retention (defined as continuous engagement of patients in care) in care. We aimed to analyze the ART program in Ethiopia.
Methods
A mix of quantitative and qualitative methods was used. Routine ART program data was used to study ART scale up and patient retention in care. In-depth interviews and focus group discussions were conducted with program managers.
Results
The number of people receiving ART in Ethiopia increased from less than 9,000 in 2005 to more than 439, 000 in 2013. Initially, the public health approach, health system strengthening, community mobilization and provision of care and support services allowed scaling up of ART services. While ART was being scaled up, retention was recognized to be insufficient. To

improve retention, a second wave of interventions, related to programmatic, structural, socio-cultural, and patient information systems, have been implemented. Retention rate increased from 77% in 2004/5 to 92% in 2012/13.
Conclusion
Ethiopia has been able to scale up ART and improve retention in care in spite of its limited resources. This has been possible due to interventions by the ART program, supported by health systems strengthening, community-based organizations and the communities themselves. ART programs in resource-limited settings need to put in place similar measures to scale up ART and retain patients in care.

Global Public Health
Volume 9, Issue 5, 2014
http://www.tandfonline.com/toc/rgph20/.Uq0DgeKy-F9#.U4onnCjDU1w

Locating global health in social medicine
Seth M. Holmesab*, Jeremy A. Greenec & Scott D. Stoningtonde
DOI: 10.1080/17441692.2014.897361
pages 475-480
Abstract
Global health's goal to address health issues across great sociocultural and socioeconomic gradients worldwide requires a sophisticated approach to the social root causes of disease and the social context of interventions. This is especially true today as the focus of global health work is actively broadened from acute to chronic and from infectious to non-communicable diseases. To respond to these complex biosocial problems, we propose the recent expansion of interest in the field of global health should look to the older field of social medicine, a shared domain of social and medical sciences that offers critical analytic and methodological tools to elucidate who gets sick, why and what we can do about it. Social medicine is a rich and relatively untapped resource for understanding the hybrid biological and social basis of global health problems. Global health can learn much from social medicine to help practitioners understand the social behaviour, social structure, social networks, cultural difference and social context of ethical action central to the success or failure of global health's important agendas. This understanding – of global health as global social medicine – can coalesce global health's unclear identity into a coherent framework effective for addressing the world's most pressing health issues.

Religious coping among women with obstetric fistula in Tanzania
Melissa H. Watta*, Sarah M. Wilsonab, Mercykutty Josephc, Gileard Masengac, Jessica C. MacFarlanea, Olola Onekoc & Kathleen J. Sikkemaab
DOI: 10.1080/17441692.2014.903988
pages 516-527
Abstract
Religion is an important aspect of Tanzanian culture, and is often used to cope with adversity and distress. This study aimed to examine religious coping among women with obstetric fistulae. Fifty-four women receiving fistula repair at a Tanzanian hospital completed a structured survey. The Brief RCOPE assessed positive and negative religious coping strategies. Analyses included associations between negative religious coping and key variables (demographics, religiosity, depression, social support and stigma). Forty-five women also completed individual in-depth interviews where religion was discussed. Although participants utilised positive religious coping strategies more frequently than negative strategies ($p < .001$), 76% reported

at least one form of negative religious coping. In univariate analysis, negative religious coping was associated with stigma, depression and low social support. In multivariate analysis, only depression remained significant, explaining 42% of the variance in coping. Qualitative data confirmed reliance upon religion to deal with fistula-related distress, and suggested that negative forms of religious coping may be an expression of depressive symptoms. Results suggest that negative religious coping could reflect cognitive distortions and negative emotionality, characteristic of depression. Religious leaders should be engaged to recognise signs of depression and provide appropriate pastoral/spiritual counselling and general psychosocial support for this population.

Generating political priority for newborn survival in three low-income countries

Stephanie L. Smitha*, Jeremy Shiffmanb & Abigail Kazembec

Free access
DOI: 10.1080/17441692.2014.904918
pages 538-554

Abstract

Deaths to babies in their first 28 days of life now account for more than 40% of global under-5 child mortality. High neonatal mortality poses a significant barrier to achieving the child survival Millennium Development Goal. Surmounting the problem requires national-level political commitment, yet only a few nation-states have prioritised this issue. We compare Bolivia, Malawi and Nepal, three low-income countries with high neonatal mortality, with a view to understanding why countries prioritise or neglect the issue. The three have had markedly different trajectories since 2000: attention grew steadily in Nepal, stagnated then grew in Malawi and grew then stagnated in Bolivia. The comparison suggests three implications for proponents seeking to advance attention to neglected health issues in low-income countries: the value of (1) advancing solutions with demonstrated efficacy in low-resource settings, (2) building on existing and emerging national priorities and (3) developing a strong network of domestic and international allies. Such actions help policy communities to weather political storms and take advantage of policy windows.

Health Affairs

May 2014; Volume 33, Issue 5
http://content.healthaffairs.org/content/current

Theme: US Hospitals - Responding To An Uncertain Environment

[No relevant content]

Health and Human Rights

Volume 15, Issue 2
http://www.hhrjournal.org/

[Reviewed earlier]

Health Economics, Policy and Law

Volume 9 / Issue 02 / April 2014
http://journals.cambridge.org/action/displayIssue?jid=HEP&tab=currentissue

[Reviewed earlier]

Health Policy and Planning
Volume 29 Issue 3 May 2014
http://heapol.oxfordjournals.org/content/current
[Reviewed earlier]

Human Vaccines & Immunotherapeutics (formerly Human Vaccines)
May 2014 Volume 10, Issue 5
http://www.landesbioscience.com/journals/vaccines/toc/volume/10/issue/5/
[Reviewed earlier]

Infectious Agents and Cancer
http://www.infectagentscancer.com/content
[Accessed 31 May 2014]
[No new relevant content]

Infectious Diseases of Poverty
http://www.idpjournal.com/content
[Accessed 31 May 2014]
Scoping Review
Surveillance-response systems: the key to elimination of tropical diseases
Ernest Tambo, Lin Ai, Xia Zhou, Jun-Hu Chen, Wei Hu, Robert Bergquist, Jia-Gang Guo, Jürg Utzinger, Marcel Tanner and Xiao-Nong Zhou
Author Affiliations
Infectious Diseases of Poverty 2014, 3:17 doi:10.1186/2049-9957-3-17
Published: 27 May 2014
Abstract (provisional)
Tropical diseases remain a major cause of morbidity and mortality in developing countries. Although combined health efforts brought about significant improvements over the past 20 years, communities in resource-constrained settings lack the means of strengthening their environment in directions that would provide less favourable conditions for pathogens. Still, the impact of infectious diseases is declining worldwide along with progress made regarding responses to basic health problems and improving health services delivery to the most vulnerable populations. The London Declaration on Neglected Tropical Diseases (NTDs), initiated by the World Health Organization's NTD roadmap, set out the path towards control and eventual elimination of several tropical diseases by 2020, providing an impetus for local and regional disease elimination programmes. Tropical diseases are often patchy and erratic, and there are differing priorities in resources-limited and endemic countries at various levels of their public health systems. In order to identify and prioritize strategic research on elimination of tropical diseases, the '1st Forum on Surveillance-Response System Leading to Tropical Diseases Elimination' was convened in Shanghai in June 2012. Current strategies and the NTD roadmap were reviewed, followed by discussions on how to identify and critically examine prevailing challenges and opportunities, including inter-sectoral collaboration and approaches for elimination of several infectious, tropical diseases. A priority research agenda within a 'One Health-One World' frame of global health was developed, including the establishment of (i) a

platform for resource-sharing and effective surveillance-response systems for Asia Pacific and Africa with an initial focus on elimination of lymphatic filariasis, malaria and schistosomiasis; (ii) development of new strategies, tools and approaches, such as improved diagnostics and antimalarial therapies; (iii) rigorous validation of surveillance-response systems; and (iv) designing pilot studies to transfer Chinese experiences of successful surveillance-response systems to endemic countries with limited resources.

International Journal of Epidemiology
Volume 43 Issue 2 April 2014
http://ije.oxfordjournals.org/content/current
[Reviewed earlier]

International Journal of Infectious Diseases
Vol 23 Complete | June 2014 | Pages 1-108
http://www.ijidonline.com/current
[Reviewed earlier]

JAMA
May 28, 2014, Vol 311, No. 20
http://jama.jamanetwork.com/issue.aspx
Viewpoint
Commitment Devices - Using Initiatives to Change Behavior
Todd Rogers, PhD1; Katherine L. Milkman, PhD2; Kevin G. Volpp, MD, PhD3
Initial text
Unhealthy behaviors are responsible for a large proportion of health care costs and poor health outcomes.1 Surveys of large employers regularly identify unhealthy behaviors as the most important challenge to affordable benefits coverage. For this reason, employers increasingly leverage incentives to encourage changes in employees' health-related behaviors. According to one survey, 81% of large employers provide incentives for healthy behavior change.2 In this Viewpoint, we discuss the potential and limitations of an approach that behavioral science research has shown can be used to influence health behaviors but that is distinct from incentives: the use of commitment devices…

JAMA Pediatrics
May 2014, Vol 168, No. 5
http://archpedi.jamanetwork.com/issue.aspx
[Reviewed earlier; No relevant content]

Journal of Community Health
Volume 39, Issue 3, June 2014
http://link.springer.com/journal/10900/39/3/page/1
[Reviewed earlier]

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

Journal of Health Care for the Poor and Underserved (JHCPU)
Volume 25, Number 2, May 2014
http://muse.jhu.edu/journals/journal_of_health_care_for_the_poor_and_underserved/toc/hpu.25.2.html
[Reviewed earlier]

Journal of Health Organization and Management
Volume 28 issue 3 - Latest Issue
http://www.emeraldinsight.com/journals.htm?issn=1477-7266&show=latest
[No relevant content]

Journal of Infectious Diseases
Volume 209 Issue 11 June 1, 2014
http://jid.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Global Infectious Diseases (JGID)
Volume 6 | Issue 2 Page Nos. 57-92 April-June 2014
http://www.jgid.org/currentissue.asp?sabs=n
[Reviewed earlier]

Journal of Immigrant and Minority Health
Volume 16, Issue 3, June 2014
http://link.springer.com/journal/10903/16/3/page/1
HPV Awareness and Vaccine Acceptability in Hispanic Women Living Along the US-Mexico Border
Jennifer Molokwu Norma P. Fernandez Charmaine Martin
Abstract
Despite advances in prevention of cervical cancer in the US, women of Hispanic origin still bear an unequal burden in cervical cancer incidence, morbidity and mortality. Our objective was to determine the HPV vaccine knowledge and acceptability in a group of mostly Hispanic females. In this cross sectional survey, 62 % of participants heard of HPV; 34.9 % identified HPV as a cause of cervical cancer. 63 % of participants reported willingness to receive vaccine and 77 % were willing to vaccinate daughters. Those with previous abnormal PAPs were more likely to have heard of HPV and Vaccine. No other factors examined showed association with willingness to get vaccine or administer to daughters. Knowledge level remains low in this high risk

population. Willingness to receive vaccine is high despite lack of access to care. Increased targeted community based education and vaccination programs may be useful in closing disparity in cervical cancer morbidity.

Journal of Medical Ethics
June 2014, Volume 40, Issue 6
http://jme.bmj.com/content/current
[No relevant content]

Journal of Medical Microbiology
June 2014; 63 (Pt 6)
http://jmm.sgmjournals.org/content/current
[Reviewed earlier]

Journal of the Pediatric Infectious Diseases Society (JPIDS)
Volume 3 Issue 2 June 2014
http://jpids.oxfordjournals.org/content/current
[Reviewed earlier]

Journal of Pediatrics
Vol 164 | No. 6 | June 2014 | Pages 1245-1504
http://www.jpeds.com/current
[Reviewed earlier]

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

Journal of the Royal Society – Interface
July 6, 2014; 11 (96)
http://rsif.royalsocietypublishing.org/content/current
[No relevant content]

Journal of Virology
June 2014, volume 88, issue 11
http://jvi.asm.org/content/current
[No relevant content]

The Lancet

May 31, 2014 Volume 383 Number 9932 p1861 – 1944 e16 - 18
http://www.thelancet.com/journals/lancet/issue/current

Editorial

Polio eradication: the CIA and their unintended victims

The Lancet

Preview

On May 2, 2011, President Barack Obama announced that the US Central Intelligence Agency (CIA) had located and killed Osama Bin Laden. The agency organised a fake hepatitis vaccination campaign in Abottabad, Pakistan, in a bid to obtain DNA from the children of Bin Laden, to confirm the presence of the family in a compound and sanction the rollout of a risky and extensive operation. Release of this information has had a disastrous effect on worldwide eradication of infectious diseases, especially polio.

Offline: WHO offers a new future for sustainable development

Richard Horton

Preview /

WHO has made its definitive statement about the future it envisions for the post-2015 era of sustainable development. At a standing-room only technical briefing during last week's World Health Assembly, WHO's Director-General, Dr Margaret Chan, launched the agency's much anticipated position. Dr Chan emphasises at every possible opportunity that WHO is a member-state organisation and can act only at the request of those member states. This loyalty to intergovernmental decision-making, underlining WHO's role as a technical secretariat, has, not surprisingly, made Dr Chan popular among countries.

Rethinking the foundations of global governance for health: the youth response

Unni Gopinathan, Daniel Hougendobler, Nick Watts, Cristóbal Cuadrado, Renzo R Guinto, Alexandre Lefebvre, Saveetha Meganathan, Waruguru Wanjau, Jacob Jorem, Nilofer Khan Habibullah, Peter Asilia, Usman Ahmad Mushtaq

Preview /

In its recent report, The Lancet–University of Oslo Commission on Global Governance for Health declared that health "should be adopted as a universal value and a shared social and political objective for all".1 This rallying cry is simple, compelling, and—most importantly—widely appealing. It provides a firm foothold for a renewed call for strengthened global governance. The Commission's report, which builds upon the evidence base on social determinants of health,2 offers a normative framework for evaluating global governance by assessing the impacts of various sectors on health.

Blood pressure and incidence of twelve cardiovascular diseases: lifetime risks, healthy life-years lost, and age-specific associations in 1·25 million people

Dr Eleni Rapsomaniki PhD a b, Prof Adam Timmis FRCP a d, Julie George PhD a b, Mar Pujades-Rodriguez PhD a b, Anoop D Shah MRCP a b, Spiros Denaxas PhD a b, Ian R White PhD h, Prof Mark J Caulfield MD a e, Prof John E Deanfield FRCP a c, Prof Liam Smeeth FRCGP a f, Prof Bryan Williams FRCP a g, Prof Aroon Hingorani FRCP a b, Prof Harry Hemingway FRCP a b

Summary

Background

The associations of blood pressure with the different manifestations of incident cardiovascular disease in a contemporary population have not been compared. In this study, we aimed to analyse the associations of blood pressure with 12 different presentations of cardiovascular disease.

Methods

We used linked electronic health records from 1997 to 2010 in the CALIBER (CArdiovascular research using LInked Bespoke studies and Electronic health Records) programme to assemble a cohort of 1·25 million patients, 30 years of age or older and initially free from cardiovascular disease, a fifth of whom received blood pressure-lowering treatments. We studied the heterogeneity in the age-specific associations of clinically measured blood pressure with 12 acute and chronic cardiovascular diseases, and estimated the lifetime risks (up to 95 years of age) and cardiovascular disease-free life-years lost adjusted for other risk factors at index ages 30, 60, and 80 years. This study is registered at ClinicalTrials.gov, number NCT01164371.

Findings

During 5·2 years median follow-up, we recorded 83 098 initial cardiovascular disease presentations. In each age group, the lowest risk for cardiovascular disease was in people with systolic blood pressure of 90—114 mm Hg and diastolic blood pressure of 60—74 mm Hg, with no evidence of a J-shaped increased risk at lower blood pressures. The effect of high blood pressure varied by cardiovascular disease endpoint, from strongly positive to no effect. Associations with high systolic blood pressure were strongest for intracerebral haemorrhage (hazard ratio 1·44 [95% CI 1·32—1·58]), subarachnoid haemorrhage (1·43 [1·25—1·63]), and stable angina (1·41 [1·36—1·46]), and weakest for abdominal aortic aneurysm (1·08 [1·00—1·17]). Compared with diastolic blood pressure, raised systolic blood pressure had a greater effect on angina, myocardial infarction, and peripheral arterial disease, whereas raised diastolic blood pressure had a greater effect on abdominal aortic aneurysm than did raised systolic pressure. Pulse pressure associations were inverse for abdominal aortic aneurysm (HR per 10 mm Hg 0·91 [95% CI 0·86—0·98]) and strongest for peripheral arterial disease (1·23 [1·20—1·27]). People with hypertension (blood pressure ≥140/90 mm Hg or those receiving blood pressure-lowering drugs) had a lifetime risk of overall cardiovascular disease at 30 years of age of 63·3% (95% CI 62·9—63·8) compared with 46·1% (45·5—46·8) for those with normal blood pressure, and developed cardiovascular disease 5·0 years earlier (95% CI 4·8—5·2). Stable and unstable angina accounted for most (43%) of the cardiovascular disease-free years of life lost associated with hypertension from index age 30 years, whereas heart failure and stable angina accounted for the largest proportion (19% each) of years of life lost from index age 80 years.

Interpretation

The widely held assumptions that blood pressure has strong associations with the occurrence of all cardiovascular diseases across a wide age range, and that diastolic and systolic associations are concordant, are not supported by the findings of this high-resolution study. Despite modern treatments, the lifetime burden of hypertension is substantial. These findings emphasise the need for new blood pressure-lowering strategies, and will help to inform the design of randomised trials to assess them.

Funding

Medical Research Council, National Institute for Health Research, and Wellcome Trust.

The Lancet Global Health
Jun 2014 Volume 2 Number 6 e301 - 363
http://www.thelancet.com/journals/langlo/issue/current
[Reviewed earlier]

The Lancet Infectious Diseases
Jun 2014 Volume 14 Number 6 p441 - 532

http://www.thelancet.com/journals/laninf/issue/current
[Reviewed earlier]

Medical Decision Making (MDM)
May 2014; 34 (4)
http://mdm.sagepub.com/content/current
[Reviewed earlier]

The Milbank Quarterly
A Multidisciplinary Journal of Population Health and Health Policy
March 2014 Volume 92, Issue 1 Pages 1–166
http://onlinelibrary.wiley.com/journal/10.1111/(ISSN)1468-0009/currentissue
[Reviewed earlier]

Nature
Volume 509 Number 7502 pp533-656 29 May 2014
http://www.nature.com/nature/current_issue.html
Global health: Deadly dinners
Polluting biomass stoves, used by one-third of the global population, take a terrible toll. But efforts to clean them up are failing.
Meera Subramanian
Nature | Comment
Policy: An intergovernmental panel on antimicrobial resistance
Mark Woolhouse & Jeremy Farrar
22 May 2014
Drug-resistant microbes are spreading. A coordinated, global effort is needed to keep drugs working and develop alternatives, say Mark Woolhouse and Jeremy Farrar.
Excerpt from full text

Last month, the World Health Organization (WHO) produced a global map[1] of antimicrobial resistance, warning that a 'post-antibiotic' world could soon become a reality. In some ways, it already has.

Drugs that were once lifesavers are now worthless. Chloramphenicol, once a physician's first choice against typhoid, is no longer effective in many parts of the world. Strains of extensively drug-resistant tuberculosis (TB), methicillin-resistant Staphylococcus aureus (MRSA), multidrug-resistant Escherichia coli and Klebsiellapneumoniae are serious threats to public health. Plasmodium falciparum (the parasite that causes the most dangerous form of malaria) is developing resistance to all known classes of antimalarial drug, threatening the remarkable progress that has been made against the disease. HIV is increasingly resistant to first-line antiviral drugs. Every class of antibiotic is increasingly compromised by resistance, as are many antivirals, antiparasitic and antifungal drugs.

It could get worse: routine medical care, surgery, cancer treatment, organ transplants and industrialized agriculture would be impossible in their present form without antimicrobials. And the treatment of many infectious human and livestock diseases now relies on just one or two drugs.

Resistance has spread around the world. MRSA has spread between continents2, as have resistant strains of TB, malaria, HIV and pneumococci. Genes conferring resistance to β-lactams — antibiotics used against a broad range of infections, including E. coli and K. pneumoniae — have spread to bacterial populations worldwide, probably originating in the Indian subcontinent3. Numerous drug-resistant malaria strains have spread from southeast Asia to Africa.

Nature Immunology
June 2014, Volume 15 No 6 pp483-587
http://www.nature.com/ni/journal/v15/n6/index.html
Focus on Post-Transcriptional and Post-Translational Control of Immunity
[Reviewed earlier]

Nature Medicine
May 2014, Volume 20 No 5 pp451-560
http://www.nature.com/nm/journal/v20/n5/index.html
[No relevant content]

Nature Reviews Immunology
May 2014 Vol 14 No 5
http://www.nature.com/nri/journal/v14/n5/index.html
[No relevant content]

New England Journal of Medicine
May 29, 2014 Vol. 370 No. 22
http://www.nejm.org/toc/nejm/medical-journal
Perspective
Embracing Oral Cholera Vaccine — The Shifting Response to Cholera
Jean William Pape, M.D., and Vanessa Rouzier, M.D.
N Engl J Med 2014; 370:2067-2069 May 29, 2014 DOI: 10.1056/NEJMp1402837
Cholera, a rapidly dehydrating diarrheal disease, is caused by ingestion of Vibrio cholerae, serogroup O1 or O139. The World Health Organization (WHO) estimates that 1.4 billion people were at risk for cholera in 2012.1 More than 90% of reported cases occur in Africa, and most of the remainder occur in southern Asia. In 2010, only 10 months after it was hit by a major earthquake, Haiti experienced the most severe cholera epidemic of the past century, with 699,579 cases and 8539 related deaths reported as of February 11, 2014. This was the first time cholera had been documented in Haiti, despite the occurrence of devastating outbreaks in the Caribbean in the 19th century and in Latin America between 1991 and 2001 (see
Cholera is a disease of poverty, linked to poor sanitation and a lack of potable water.
Establishment of an adequate sanitation and potable-water system is the most definitive way to prevent and limit its spread. However, the cost of instituting adequate sanitation systems, one of the United Nations Millennium Development Goals, is prohibitive for the countries that are affected by cholera: it would cost an estimated $2.2 billion, for example, to adequately improve access to water and sanitation in Haiti. Water, sanitation, and hygiene (WASH)

practices are the cornerstones of cholera prevention and control. The promotion of WASH practices, the creation of rehydration centers, use of antibiotics, and training of health personnel during the first months of the Haitian epidemic led to a dramatic reduction in cholera-associated mortality, from 4% to 1.5%.[2] Yet a survey in the slums of Port-au-Prince showed that although people were aware of hand-washing methods, they did not have soap and water to implement them. What role should oral cholera vaccine (OCV) play, in combination with WASH practices, in epidemic conditions?

The three currently licensed OCVs are formulations of killed V. cholerae cells. Two of them, Dukoral and Shanchol, have been prequalified by the WHO for purchase by United Nations agencies. The third one, mORCVAX, is licensed and produced exclusively in Vietnam. For all three vaccines, there is evidence of safety and efficacy (66 to 85%) after two doses, with inferred herd protection and immunity lasting up to 5 years (in the case of Shanchol). Dukoral includes a cholera toxin B subunit requiring administration with a buffer, and it costs $3.64 to $6.00 per dose. Shanchol does not require a buffer and costs $1.85 per dose. Despite the evidence of safety and efficacy, international agencies cited several reasons for not including OCV in the prevention package during the 2010 Haitian epidemic.[2]

First, there was a limited number of OCV doses available worldwide. Second, Shanchol, the cheaper and easier-to-administer vaccine, could not be purchased by United Nations agencies until it received WHO approval in 2011. Third, there was concern that OCV implementation would compete with other WASH interventions in countries with fragile health systems. After sustained lobbying by multiple institutions and organizations, a pilot intervention was initiated in Haiti using OCV with other WASH measures to control the outbreak ("reactive vaccination"). An urban project was conducted by the Haitian Group for the Study of Kaposi's Sarcoma and Opportunistic Infections (GHESKIO), and a rural project was conducted by Partners in Health, both in collaboration with the Haitian Ministry of Health. The outcomes showed that OCV can be effectively employed as part of a comprehensive cholera-control program: 91% of 97,774 participants received two vaccine doses during a 90-day period.[3,4]

The WHO has since changed its policy and promotes OCV use in outbreaks worldwide.[5] During the past 3 years, more than 1.6 million doses of Shanchol have been administered in Asia, Africa, and the Caribbean. A remaining challenge to OCV implementation was the lack of field evidence for its effectiveness early in an epidemic. The matched case–control study in Guinea, reported on by Luquero et al. in this issue of the Journal (pages 2111–2120), clearly illustrates the role OCV can play in countering cholera epidemics, with greater than 86% protection after administration of two doses.

Although the global stockpile of Shanchol is growing — the WHO has 2 million doses, and the Global Alliance for Vaccines and Immunization (GAVI) has pledged support for 20 million doses over the next 5 years — the world will need millions more doses. Moreover, many questions remain. For instance, how should priorities be set for use of the stockpile when there are multiple simultaneous epidemics (requiring reactive vaccination), other high-risk situations (e.g., encampments of refugees who could benefit from preemptive vaccination), and regions where cholera is endemic and peaks in incidence are expected during the rainy season? Risk evaluation and cost-effectiveness will certainly be important considerations.

In addition, because of their study's small sample size, Luquero et al. could not test the efficacy of one versus two doses of OCV. A one-dose regimen would reduce the cost and logistic constraints for national scale-up programs. A collaborative double-blind, placebo-controlled study that the International Vaccine Institute and the International Center for Diarrheal Disease Research, Bangladesh, are conducting in Dhaka may provide this information.

Another question is whether OCV can be stored at room temperature so that the cold-chain requirement can be bypassed. In the study by Luquero et al., the vaccine was refrigerated during storage, but the cold chain was not maintained in the field. It will be important to determine how long the vaccine can retain its efficacy at room temperature.

Furthermore, can Shanchol be used in pregnancy and in children younger than 1 year of age? Although WHO recommendations suggest targeting pregnant women at high risk for cholera, the manufacturer has not approved use of the vaccine in pregnancy, and there are no guidelines for children under 1 year old.

Since 2010, some major obstacles preventing the use of OCV have been overcome. Shanchol, the cheapest and easiest-to-administer vaccine, is being stockpiled. OCV has been used in 13 countries on three continents (Asia, Africa, and the North American Caribbean) and in three risk settings. The study by Luquero et al. provides further evidence in favor of using OCV in emerging outbreaks.

Original Article

Use of Vibrio cholerae Vaccine in an Outbreak in Guinea

Francisco J. Luquero, M.D., M.P.H., Lise Grout, D.V.M., M.P.H., Iza Ciglenecki, M.D., Keita Sakoba, M.D., Bala Traore, M.D., Melat Heile, N.P., Alpha Amadou Diallo, M.Sc., Christian Itama, M.D., Anne-Laure Page, Ph.D., Marie-Laure Quilici, Ph.D., Martin A. Mengel, M.D., Jose Maria Eiros, M.D., Ph.D., Micaela Serafini, M.D., M.P.H., Dominique Legros, M.D., M.P.H., and Rebecca F. Grais, Ph.D.

N Engl J Med 2014; 370:2111-2120 May 29, 2014 DOI: 10.1056/NEJMoa1312680

Abstract

The use of vaccines to prevent and control cholera is currently under debate. Shanchol is one of the two oral cholera vaccines prequalified by the World Health Organization; however, its effectiveness under field conditions and the protection it confers in the first months after administration remain unknown. The main objective of this study was to estimate the short-term effectiveness of two doses of Shanchol used as a part of the integrated response to a cholera outbreak in Africa.

Full Text of Background...

Methods

We conducted a matched case–control study in Guinea between May 20 and October 19, 2012. Suspected cholera cases were confirmed by means of a rapid test, and controls were selected among neighbors of the same age and sex as the case patients. The odds of vaccination were compared between case patients and controls in bivariate and adjusted conditional logistic-regression models. Vaccine effectiveness was calculated as (1−odds ratio)×100.

Full Text of Methods...

Results

Between June 8 and October 19, 2012, we enrolled 40 case patients and 160 controls in the study for the primary analysis. After adjustment for potentially confounding variables, vaccination with two complete doses was associated with significant protection against cholera (effectiveness, 86.6%; 95% confidence interval, 56.7 to 95.8; P=0.001).

Full Text of Results...

Conclusions

In this study, Shanchol was effective when used in response to a cholera outbreak in Guinea. This study provides evidence supporting the addition of vaccination as part of the response to an outbreak. It also supports the ongoing efforts to establish a cholera vaccine stockpile for emergency use, which would enhance outbreak prevention and control strategies. (Funded by Médecins sans Frontières.)

Full Text of Discussion...
Read the Full Article...

OMICS: A Journal of Integrative Biology
May 2014, 18(5)
http://online.liebertpub.com/toc/omi/18/5
[No new relevant content]

The Pediatric Infectious Disease Journal
June 2014 - Volume 33 - Issue 6 pp: 549-673,e135-e161
http://journals.lww.com/pidj/pages/currenttoc.aspx
[Reviewed earlier]

Pediatrics
May 2014, VOLUME 133 / ISSUE 5
http://pediatrics.aappublications.org/current.shtml
[Reviewed earlier]

Pharmaceutics
Volume 6, Issue 2 (June 2014), Pages 195-
http://www.mdpi.com/1999-4923/6/1
[Reviewed earlier; No relevant content]

Pharmacoeconomics
Volume 32, Issue 5, May 2014
http://link.springer.com/journal/40273/32/5/page/1
[Reviewed earlier]

PLoS One
[Accessed 31 May 2014]
http://www.plosone.org/
Research Article
Identifying the Science and Technology Dimensions of Emerging Public Policy Issues through Horizon Scanning
Miles Parker mail, Andrew Acland, Harry J. Armstrong, Jim R. Bellingham, Jessica Bland, Helen C. Bodmer, Simon Burall, Sarah Castell, Jason Chilvers, David D. Cleevely, David Cope, Lucia Costanzo, James A. Dolan, [...], William J. Sutherland , [view all]
Abstract
Public policy requires public support, which in turn implies a need to enable the public not just to understand policy but also to be engaged in its development. Where complex science and technology issues are involved in policy making, this takes time, so it is important to identify emerging issues of this type and prepare engagement plans. In our horizon scanning exercise,

we used a modified Delphi technique [1]. A wide group of people with interests in the science and policy interface (drawn from policy makers, policy adviser, practitioners, the private sector and academics) elicited a long list of emergent policy issues in which science and technology would feature strongly and which would also necessitate public engagement as policies are developed. This was then refined to a short list of top priorities for policy makers. Thirty issues were identified within broad areas of business and technology; energy and environment; government, politics and education; health, healthcare, population and aging; information, communication, infrastructure and transport; and public safety and national security.

PLoS Medicine
http://www.plosmedicine.org/
(Accessed 31 May 2014)
Editorial
The Role of Open Access in Reducing Waste in Medical Research
Paul Glasziou mail
Published: May 27, 2014
DOI: 10.1371/journal.pmed.1001651
[Full text]

Twenty years ago an editorial by Doug Altman in the BMJ [1], "The Scandal of Poor Medical Research", decried the poor design and reporting of research, stating that "huge sums of money are spent annually on research that is seriously flawed through the use of inappropriate designs, unrepresentative samples, small samples, incorrect methods of analysis, and faulty interpretation". Since then, change has been gradual, while the list of problems has lengthened, and documentation of their magnitude has accumulated. Recent years, however, have seen a crescendo of concern. Public awareness has been accelerated with the publication of Ben Goldacre's Bad Pharma [2], which clearly articulated the problems posed by biased non-publication and reporting of pharmaceutical research. Wider awareness of these issues helped spark the AllTrials campaign (http://www.alltrials.net/), which asks for "all trials registered; all results reported". Of course, the problems of poor design and reporting, as well as selective non-publication, extend well beyond drug trials to most areas of research: drug and non-drug, basic and applied, interventional and observational, animal and human. A 2009 paper in The Lancet [3] estimated that three problems—flawed design, non-publication, and poor reporting—together meant over 85% of research funds were wasted, implying a global total loss of over US$100 billion per year. This year, a follow-up series [4] more extensively documented this wastage, confirming the earlier estimate, but adding details and a series of more explicit recommendations for action.

The waste sounds bad, but the reality is worse. The estimate that 85% of research is wasted referred only to activities prior to the point of publication. Much waste clearly occurs after publication: from poor access, poor dissemination, and poor uptake of the findings of research. The development of open access to research [5] is important to reduce this post-publication waste. Poor access—including paywalls, restrictions on re-publication and re-use, etc.—limits both researcher-to-researcher and researcher-to-clinician communications. As PLOS Medicine editorial leaders pointed out in a PubMed Commons response to the Lancet series [6], open access is more than free access and includes "free, immediate access online; unrestricted distribution and re-use rights in perpetuity for humans and technological applications; author(s) retains rights to attribution; papers are immediately deposited in a public online archive, such as PubMed Central" [7]. Globally, the most important access problem is arguably due to

language barriers, and with the growth of research in non-English-speaking countries, particularly China, this problem is likely to grow. Language barriers make even free-access research unusable, but by eliminating restrictions on re-publication and re-use, open access can at least reduce barriers to translation.

Solving the problems of pre-publication waste and post-publication access could hugely accelerate medical research. Even the complete solution of these problems, however, would be insufficient to close the research–practice gap. Paradoxically, the plethora of research is itself a barrier to its use. A recent analysis of trials and reviews by specialty found an unmanageable scatter of research [8]. For example, in neurology the annual output was 2,770 trials across 896 journals, and 547 systematic reviews across 292 journals. So, in addition to access, clever systems of synthesis, filtering, findability, and usability are needed if the users of research are to cope with this information deluge [9]. The enormous marketing budgets of pharmaceutical companies demonstrate the importance they place on investing resources in getting the message of their research to decision makers. Unfortunately, little such investment is made in non-commercial research, and this research is consequently neglected. This concern has led to the development of different approaches given names such as "evidence-based medicine", "knowledge translation", and "implementation science".

To get full value from research investment, we need to reduce both the annual US$100 billion of pre-publication (research production) waste and the unquantified cost of post-publication (research dissemination) barriers (Figure 1). Open access will not in itself fix the problems of poor research question selection, poor study design, selective non-publication, or poor or biased reporting, but these can be ameliorated considerably through appropriate editorial policies and peer review processes. Open-access medical journals must maintain particularly high standards for these processes in order to avoid merely increasing access to a biased selection of (often flawed) research. At the same time, improving research quality but keeping access restricted would mean continued waste in the use and uptake of good science.

"As the system encourages poor research," wrote Altman in 1994 [1], "it is the system that should be changed. We need less research, better research, and research done for the right reasons." To that must be added a need for research that is communicated effectively to those who need it. If over a 100 billion dollars of medical research money were being wasted by corruption, the public and political outcry would be overwhelming. That resources of this magnitude are being wasted through incompetence and inattention should be seen as a similar scandal. Badly designed and poorly thought through systems of research and dissemination subtract massively from global human health: they demand attention—and action.

References

1. Altman DG (1994) The scandal of poor medical research. BMJ 308: 283.
View Article
PubMed/NCBI
Google Scholar
2. Goldacre B (2012) Bad pharma: how drug companies mislead doctors and harm patients. London: Fourth Estate.
3. Chalmers I, Glasziou P (2009) Avoidable waste in the production and reporting of research evidence. Lancet 374: 86–89 Available: http://www.thelancet.com/journals/lancet/article/PIIS0140-6736%2809%2960329-9/fulltext. Accessed 23 April 2014.
View Article
PubMed/NCBI
Google Scholar

4. Macleod MR, Michie S, Roberts I, Dirnagl U, Chalmers I, et al. (2014) Biomedical research: increasing value, reducing waste. Lancet 6736: 1–6.
View Article
PubMed/NCBI
Google Scholar
5. Joseph H (2013) The open access movement grows up: taking stock of a revolution. PLoS Biol 11: e1001686 Available:http://www.plosbiology.org/article/info%3Adoi%2F10.1371%2Fjournal.pbio.1001686. Accessed 23 April 2014.
View Article
PubMed/NCBI
Google Scholar
6. Glasziou P, Altman DG, Bossuyt P, Boutron I, Clarke M, et al. (2014) Research: increasing value, reducing waste 5 Reducing waste from incomplete or unusable reports of biomedical research. Lancet 383: 267–276.
View Article
PubMed/NCBI
Google Scholar
7. Barbour V, Peiperl L (2014) Comment on PMID 24411647: Reducing waste from incomplete or unusable reports of biomedical research. PubMed Commons Available: http://www.ncbi.nlm.nih.gov/myncbi/ginny.barbour.1/comments/. Accessed 28 April 2014.
View Article
PubMed/NCBI
Google Scholar
8. Hoffmann T, Erueti C, Thorning S, Glasziou P (2012) The scatter of research: cross sectional comparison of randomised trials and systematic reviews across specialties. BMJ 3223: 1–9 doi:10.1136/bmj.e3223.
View Article
PubMed/NCBI
Google Scholar
9. Glasziou P, Haynes RB (2005) The paths from research to improved health outcomes. Evid Based Med 10: 4–7.
View Article
PubMed/NCBI
Google Scholar

PLoS Neglected Tropical Diseases
May 2014
http://www.plosntds.org/article/browseIssue.action

Editorial

Ten Global "Hotspots" for the Neglected Tropical Diseases

Peter J. Hotez mail

Published: May 29, 2014
DOI: 10.1371/journal.pntd.0002496

Initial text

Since the founding of PLOS Neglected Tropical Diseases more than six years ago, I have written about the interface between disease and geopolitics. The neglected tropical diseases (NTDs) are the world's most common infections of people living in poverty [1]. Where they are

widespread in affected communities and nations, NTDs can be highly destabilizing and ultimately may promote conflict and affect international and foreign policy [2]. Many of the published papers in this area were recently re-organized in a PLOS "Geopolitics of Neglected Tropical Diseases" collection that was posted on our website in the fall of 2012, coinciding with the start of our sixth anniversary [3]. From this information, a number of new and interesting findings emerged about the populations who are most vulnerable to the NTDs, including the extreme poor who live in the large, middle-income countries and even some wealthy countries (such as the United States) that comprise the Group of Twenty (G20) countries [4], as well as selected Aboriginal populations [5]. Together, the PLOS "Geopolitics of Neglected Tropical Diseases" collection and the G20 analyses identified more than a dozen areas of the world that repeatedly show up as ones where NTDs disproportionately affect the poorest people living at the margins. Here, I summarize what I view as ten of the worst global "hotspots" where NTDs predominate (Figure 1). They represent regions of the world that will require special emphasis for NTD control and elimination if we still aspire to meet Millennium Development Goals (MDGs) and targets by 2015; they are regions that may need to be highlighted again as we consider post-MDG aspirations and new Sustainable Development Goals (SDGs).

Viewpoints

The Gulf Coast: A New American Underbelly of Tropical Diseases and Poverty
Peter J. Hotez, Kristy O. Murray, Pierre Buekens
PLOS Neglected Tropical Diseases: published 15 May 2014 |
info:doi/10.1371/journal.pntd.0002760

From Haiti to the Amazon: Public Health Issues Related to the Recent Immigration of Haitians to Brazil
Tom Rawlinson, André Machado Siqueira, Gilberto Fontes, Renata Paula Lima Beltrão, Wuelton Marcelo Monteiro, Marilaine Martins, Edson Fidelis Silva-Júnior, Maria Paula Gomes Mourão, Bernardino Albuquerque, Maria das Graças Costa Alecrim, Marcus Vinícius Guimarães Lacerda
PLOS Neglected Tropical Diseases: published 08 May 2014 |
info:doi/10.1371/journal.pntd.0002685

Building Endogenous Capacity for the Management of Neglected Tropical Diseases in Africa: The Pioneering Role of ICIPE
Daniel K. Masiga, Lilian Igweta, Rajinder Saini, James P. Ochieng'-Odero, Christian Borgemeister
PLOS Neglected Tropical Diseases: published 15 May 2014 |
info:doi/10.1371/journal.pntd.0002687

PNAS - Proceedings of the National Academy of Sciences of the United States of America
http://www.pnas.org/content/early/
(Accessed 31 May 2014)
[No new relevant content]

Pneumonia
Vol 4 (2014)
https://pneumonia.org.au/index.php/pneumonia/issue/current
[Reviewed earlier]

Public Health Ethics
Volume 7 Issue 1 April 2014
http://phe.oxfordjournals.org/content/current
[Reviewed earlier]

Qualitative Health Research
June 2014; 24 (6)
http://qhr.sagepub.com/content/current
[Reviewed earlier; No relevant content]

Revista Panamericana de Salud Pública/Pan American Journal of Public Health (RPSP/PAJPH)
March 2014 Vol. 35, No. 3
http://www.paho.org/journal/index.php?option=com_content&view=article&id=141&Itemid=235&lang=en
[Reviewed earlier]

Risk Analysis
May 2014 Volume 34, Issue 5 Pages 789–980
http://onlinelibrary.wiley.com/doi/10.1111/risa.2014.34.issue-5/issuetoc
[Reviewed earlier; No relevant content]

Science
30 May 2014 vol 344, issue 6187, pages 937-1056
http://www.sciencemag.org/current.dtl
[No relevant content]

Social Science & Medicine
Volume 113, In Progress (July 2014)
http://www.sciencedirect.com/science/journal/02779536/113/supp/C
[Reviewed earlier]

Tropical Medicine and Health
Vol. 42(2014) No. 1
https://www.jstage.jst.go.jp/browse/tmh/42/1/_contents
[Reviewed earlier; No relevant content]

Vaccine
Volume 32, Issue 28, Pages 3469-3568 (12 June 2014)
http://www.sciencedirect.com/science/journal/0264410X/32/28
[Reviewed earlier]

Vaccine: Development and Therapy
(Accessed 31 May 2014)
http://www.dovepress.com/vaccine-development-and-therapy-journal
[No new relevant content]

Vaccines — Open Access Journal
(Accessed 31 May 2014)
http://www.mdpi.com/journal/vaccines
[No new relevant content]

Value in Health
Vol 17 | No. 3 | May 2014
http://www.valueinhealthjournal.com/current
[Reviewed earlier]

WHO South-East Asia Journal of Public Health
Volume 3, Issue 1, January-March 2014, 1-122
http://www.searo.who.int/publications/journals/seajph/issues/whoseajphv3n1/en/
Special Issue on Vector-borne diseases
[Reviewed earlier]

From Google Scholar & other sources: Selected Journal Articles, Newsletters, Dissertations, Theses, Commentary

AIDS Research and Human Retroviruses
May 2014, ahead of print.
The Immune Space: A Concept and Template for Rationalizing Vaccine Development
Dr. Amapola Manrique, Dr. Elizabeth Adams, Dr. Dan Barouch, Dr. Patricia E Fast, Dr. Barney Graham, Dr. Jerome H. Kim, Dr. James Kublin, Margaret McCluskey, Dr. Giuseppe Pantaleo, Dr. Harriet L. Robinson, Dr. Nina Russell, William Snow, and Dr. Margaret I. Johnston.
doi:10.1089/AID.2014.0040.
ABSTRACT
Empirical testing of candidate vaccines has led to the successful development of a number of lifesaving vaccines. The advent of new tools to manipulate antigens and new methods and vectors for vaccine delivery has led to a veritable explosion of potential vaccine designs. As a result, selection of candidate vaccines suitable for large-scale efficacy testing has become more challenging. This is especially true for diseases such as dengue, HIV, and tuberculosis where there is no validated animal model or correlate of immune protection. Establishing guidelines for the selection of vaccine candidates for advanced testing has become a necessity. A number of factors could be considered in making these decisions, including, for example, safety in animal and human studies, immune profile, protection in animal studies, production processes with

product quality and stability, availability of resources, and estimated cost of goods. The "immune space template" proposed here provides a standardized approach by which the quality, level, and durability of immune responses elicited in early human trials by a candidate vaccine can be described. The immune response profile will demonstrate if and how the candidate is unique relative to other candidates, especially those that have preceded it into efficacy testing and thus, what new information concerning potential immune correlates could be learned from an efficacy trial. A thorough characterization of immune responses should also provide insight into a developer's rationale for the vaccine's proposed mechanism of action. HIV vaccine researchers plan to include this general approach in up-selecting candidates for the next large efficacy trial. This "immune space" approach may also be applicable to other vaccine development endeavors where correlates of vaccine-induced immune protection remain unknown.

Quality in Primary Care
Volume 22, Number 3, June 2014
http://www.ingentaconnect.com/content/rmp/qpc/2014/00000022/00000003
Immunisation errors reported to a vaccine advice service: intelligence to improve practice
Lang, Sarah1; Ford, Karen J2; John, Tessa2; Pollard, Andrew J3; McCarthy, Noel D4
Abstract:
Background: The success of immunisation programmes depends on the quality with which they are administered. The Vaccine Advice for CliniCians Service (VACCSline) is an advice service to support immunisers and promote excellence in immunisation practice, through specialist guidance and local education, covering a catchment population of two million people. All enquiries are recorded onto a database and categorised. Vaccine error is selected when a vaccine has not been prepared or administered according to national recommendations or relevant expert guidance.
Method: All enquiries from 2009 to 2011, categorised on the VACCSline database as 'vaccine error' were analysed and subjected to a detailed free-text review.
Results: Of 4301 enquiries, 158 (3.7%) concerned vaccine errors. The greatest frequency of errors, 145 (92.9%) concerned immunisations delivered in primary care services; 92% of all errors occurred during either vaccine selection and preparation or history checking and scheduling. Administration of the wrong vaccine was the most frequent error recorded in 33.3% of reports. A shared first letter of the vaccine name was noted to occur in 13 error reports in which the incorrect vaccine was inadvertently administered. Consultations involving pairs of siblings were associated with various errors in seven enquiries. Failure to revaccinate after spillage (seven reports) showed a widespread knowledge gap in this area.
Conclusion: Advice line enquiries provide intelligence to alert immunisers to the errors that are commonly reported and may serve to highlight processes that predispose to errors, thus informing immuniser training and updating

American Journal of Obstetrics and Gynecology
Available online 22 May 2014
Utilization of the combined tetanus-diphtheria and pertussis vaccine during pregnancy
Ilona T. Goldfarb, MD, MPH1, , Sarah Little, MD, MPH2, Joelle Brown1, Laura E. Riley, MD1
Abstract
Objective

A recent increase in pertussis cases prompted the Advisory Committee on Immunization Practices to recommend administering the Tdap vaccine during each pregnancy. We sought to describe uptake of Tdap and identify predictors of vaccination in pregnancy.
Study Design
We conducted a retrospective study of all women delivering at a university hospital between February and June 2013. Demographic, pregnancy, and vaccination data were abstracted from the medical record. The relationship between maternal age, parity, gestational age, race/ethnicity, marital status, prenatal provider/site, insurance, influenza vaccination status, and Tdap vaccine was described by univariate analysis. Independent predictors were identified by multivariable logistic regression.
Results
In our cohort of 1467 women, 1194 (81.6%) received a Tdap vaccine. After adjusting for potential confounders, three factors were found to be independent predictors of receiving the vaccine. Patients were more likely to receive Tdap if they had been vaccinated against influenza during this pregnancy (aOR 1.7, 95% CI 1.4, 2.3). Black women were less likely to receive Tdap when compared to other women (aOR 0.42, 95% CI 0.27,0.67). Also, women who delivered preterm were less likely to receive the Tdap vaccine (aOR 0.33, 95% CI 0.22,0.48).
Conclusion
A high overall Tdap vaccination rate was observed following implementation of the ACIP guidelines. Black women, however, had significantly lower vaccine uptake than other women. Further research is needed to understand and minimize this disparity. Women who delivered prematurely also had a decreased rate of Tdap vaccination; vaccinating earlier should be considered to better capture this population.

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 31 May 2014
The Last Drops
Will health workers in Pakistan overcome political and religious tensions to vaccinate children against polio?
VIDEO: 47:17
Excerpt from text overview

…Pakistan is one of the last countries never to have ended polio despite concerted vaccination efforts from local, national and international organisations.

Teams of women 'vaccinators' in Pakistan struggle to achieve full coverage in a country wracked by ideological violence. Their commitment is unfailing even as they face attacks from the Taliban, as well as fearful communities that don't trust the source of the vaccines.

Determined and patient, these women go from door to door to try and get all the children protected.

A polio worker who lost two members of her family to the violence said:
"We should make an effort that people who don't want the drops, who think that this is not right, we need to make them aware. If they become aware, we won't have to work so hard for the coming generations. This disease, if God wills it, can be eradicated from this country."…

The Atlantic
http://www.theatlantic.com/magazine/
Accessed 31 May 2014
[No new, unique, relevant content]

BBC
http://www.bbc.co.uk/
Accessed 31 May 2014
[No new, unique, relevant content]

Brookings
http://www.brookings.edu/
Accessed 31 May 2014
[No new, unique, relevant content]

Council on Foreign Relations
http://www.cfr.org/
Accessed 31 May 2014
[No new, unique, relevant content]

Economist
http://www.economist.com/
Accessed 31 May 2014
[No new, unique, relevant content]

Financial Times
http://www.ft.com
Accessed 31 May 2014
[No new, unique, relevant content]

Forbes
http://www.forbes.com/
Accessed 31 May 2014
[No new, unique, relevant content]

Foreign Affairs

http://www.foreignaffairs.com/
Accessed 31 May 2014
[No new, unique, relevant content]

Foreign Policy
http://www.foreignpolicy.com/
Accessed 31 May 2014
[No new, unique, relevant content]

The Guardian
http://www.guardiannews.com/
Accessed 31 May 2014
[No new, unique, relevant content]

The Huffington Post
http://www.huffingtonpost.com/
Accessed 31 May 2014
[No new, unique, relevant content]

Le Monde
http://www.lemonde.fr/
Accessed 31 May 2014
[No new, unique, relevant content]

New Yorker
http://www.newyorker.com/
Accessed 31 May 2014
[No new, unique, relevant content]

New York Times
http://www.nytimes.com/
The Opinion Pages | Editorial
The C.I.A.'s Deadly Ruse in Pakistan
By THE EDITORIAL BOARD
MAY 26, 2014

The use of a sham vaccination program in the government's hunt for Osama bin Laden has produced a lethal backlash in Pakistan where dozens of public health workers have been murdered and fearful parents are shunning polio vaccine for their children.

Leaders of a dozen American schools of public health raised an alarm with the Obama administration 16 months ago and finally got a response this month when the White House promised that the C.I.A. will no longer use phony immunization programs in its spying operations.

The fakery — one of an assortment of intelligence stratagems before the successful raid that killed bin Laden — should never have been used in a world where hardworking health care agencies depend on the trust of local communities.

The C.I.A.'s ruse involved phony door-to-door solicitations by a physician promising to deliver hepatitis B immunizations; his real purpose was to confirm bin Laden's suspected hiding place.

The ploy helped fuel a militant backlash against immunization workers, and as many as 60 health workers and police officers have since been killed.

Meanwhile, polio is on the rise, with Pakistan accounting for 66 of the 82 cases reported so far this year by the World Health Organization. Last year, there were 93 cases of polio in Pakistan, where the health organization warns that the disease is endemic, as it is in Afghanistan and Nigeria.

The C.I.A. can no longer seek to "obtain or exploit DNA or other genetic material" gathered this way, according to a promise from the Obama administration. That is small comfort for those suffering the aftereffects of this ruse.

Convincing wary parents to accept polio vaccination — and finding health workers willing to risk violence — has been made more difficult than ever.

Reuters
http://www.reuters.com/
Accessed 31 May 2014
[No new, unique, relevant content]

Wall Street Journal
http://online.wsj.com/home-page?_wsjregion=na,us&_homepage=/home/us
Accessed 31 May 2014
[No new, unique, relevant content]

Washington Post
http://www.washingtonpost.com/
Accessed 31 May 2014
The Post's View
As measles cases increase, a sharp call for vaccinations
By Editorial Board, Published: May 29

EVEN WHEN there are significant gains against infectious diseases, there can be reversals. In 2000, measles was considered all but eliminated in the United States. For a while, there were only about 60 cases a year, mostly brought in from overseas. Now, the number of cases and outbreaks in the United States is rising again. The Centers for Disease Control and Prevention reported Thursday that there have already been more cases this year, 288, than in any full year this century.

Measles is a highly infectious respiratory disease caused by a virus that affects young children, with fever, runny nose, cough and a distinctive rash. Infrequently, it leads to more serious complications. There have been no deaths in the United States for a while, but in 2012 measles caused an estimated 122,000 deaths worldwide. That's far fewer than in the past, thanks to a global campaign to vaccinate more than a billion children in high-risk countries.

In the United States, a vigorous effort at immunization in recent years brought measles almost to a standstill. After an epidemic from 1989 to 1991 resulted in 55,000 cases and more than 100 deaths, largely because of lack of immunization among poor and uninsured children, a federal program approved in 1994, Vaccines for Children, resulted in much wider coverage. More than 90 percent of the children in the United States are immunized.

Most of the recent measles cases in the United States arrived with travelers. For example, California reported 58 cases from January through April 18 this year, the highest number for that period in 19 years. According to the CDC, 93 percent of the California cases are linked to importation of the disease. The Philippines has seen an ongoing outbreak.

Sometimes a single traveler can ignite a wildfire of infections. In 2013, a 17-year-old who had not been vaccinated returned to an orthodox Jewish community in Brooklyn from the United Kingdom, leading to an outbreak that affected 58 people; most were in three extended families that had declined the measles vaccine. This year, an outbreak in Ohio has reached 68 cases, apparently sparked by Amish missionaries, unvaccinated, who had visited the Philippines.

The measles vaccine has been in use for half a century and is safe, inexpensive and effective. Some parents suspicious of vaccines have decided against immunization; in other cases, people are simply ignorant of the risks of inaction. Not all 50 states have the toughest immunization laws and standards. Thus, in some vulnerable pockets of the United States, a single person can touch off an outbreak. A nation's borders provide no ironclad defense against viruses and bacteria. But measles can be stopped with comprehensive and proper immunization.

* * * *

Vaccines and Global Health: The Week in Review *is a service of the Center for Vaccines Ethics and Policy (CVEP) which is solely responsible for its content. Support for this service is provided by its governing institutions – Department of Medical Ethics, NYU Medical School; The Wistar Institute Vaccine Center and the Children's Hospital of Philadelphia Vaccine Education Center. Additional support is provided by the PATH Vaccine Development Program and the International Vaccine Institute (IVI), by the Bill & Melinda Gates Foundation, 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 (DCVMN). Support is also provided by a growing list of individuals who use this service to support their roles in public health, clinical practice, government, NGOs and other international institutions, academia and research organizations, and industry.*

* * * *