

## Reports from Southern Sudan

### Outbreak of Acute Watery Diarrhoea (AWD) in Northern Bahr El Ghazal State

Médecins sans Frontières in Southern Sudan has responded to an outbreak of AWD in Northern Bahr El Ghazal State in collaboration with the GOSS MOH, SMOH in Aweil Civil Hospital and health structures around the area. Heavy rains contributed to the spread of AWD. Rains have stopped but, cholera being endemic in the area, sporadic cases are still reported among the populations in most of the counties.

MSF supported the outbreaks in Wathok, Aweil Town, Wanjok PHCU, Akuem Hospital and Pariak PHCU and, to limit the spread of the disease, opened CTUs in Aweil East in Peth and Gueng Kou; other agencies opened CTUs in Maluakon or Madiang Awar.

Between July 2008 and January 2009, 7265 people (of which 1238 were severe cases) consulted or were admitted to MSF supported health structures – the majority of severe cases being seen in Peth.

*Extract of a report from MSFF Southern Sudan in January 2009. More details from [msff-juba-hom@paris.msf.org](mailto:msff-juba-hom@paris.msf.org)*

### Polio outbreak in Southern Sudan

The outbreak started in 2008 with 24 cases, in eight states, excluding Northern and Western Bahr el Gazal. In March 2009, the virus was still circulating with 16 cases reported in Lakes, Unity, Jonglei, Eastern Equatoria and Western Equatoria states. In order to interrupt the circulation, and stop the outbreak, all partners and NGOs are requested to join the Ministry of Health and help to implement the coming campaign to insure that all children less than five years of age received polio vaccine. Extracted from item posted on the South Sudan Health Forum by *Dr. Anthony Laku Stephen, MOH, GOSS 19 March 2009*

## Extracts from Journals, etc.

**Please send us more material for future issues of the Bulletin.**

### Untreated HIV depletes CD4 cells in semen - renders men more vulnerable to STIs

Investigators report that HIV infection causes a rapid depletion of immune cells in semen. This immune depletion could render HIV-positive men more vulnerable to sexually transmitted infections, and such infections can increase the risk of onward HIV transmission. However, investigators also found that HIV treatment leads to the restoration of immune system cells in semen

*Politch, J.A. et al. Depletion of CD4+ T cells in semen during HIV infection and their restoration following antiretroviral therapy. J Acquir Immune Defic Syndr (online edition), 2009.*

### HIV treatment during pregnancy does not increase risk of birth abnormalities - even when efavirenz is included

HIV treatment during pregnancy does not increase the risk of birth abnormalities. Researchers from the UK and Ireland looked at the outcome of over 8000 pregnancies in HIV-positive women over a 17 year period and found that the rate of birth abnormalities was the same as that seen in the general population.

*Townsend, CL et al. Antiretroviral therapy and congenital abnormalities in infants born to HIV-infected women in the UK and Ireland, 1990-2007. AIDS 23 (online edition), 2009.*

### Optimal testing strategy for infants at risk for MTCT in the late postnatal period

A recent survey concluded that in resource-limited settings, HIV-1 PCR testing at 4-8 weeks followed by a second test at 1 month after weaning or at 1 year of age (whichever comes first), led to the identification of the vast majority of HIV-1-infected infants.

*Brown E et al 'Determining an optimal testing strategy for infants at risk for mother-to-child transmission of HIV-1 during the late postnatal period' AIDS. 2008 Nov 12; 22(17): 2341-6.*

### Simultaneous treatment of HIV and TB improves survival

Starting treatment for both HIV and tuberculosis at the same time lowers the risk of death by around 65% in comparison with deferring HIV treatment for at least three months. The finding adds evidence to the current debate around co-treatment of the two infections.

*Velasco M et al. Effect of simultaneous use of highly active antiretroviral therapy on survival of HIV patients with tuberculosis. J Acquir Immune Defic Syndr 50:148 – 152, 2009*

### **Antiretroviral Therapy Exposure and Insulin Resistance in the Women's Interagency HIV Study**

Evidence suggesting an increased risk of cardiovascular disease in HIV-infected individuals has heightened the need to understand the relation of HIV infection, antiretroviral therapy use, and non-HIV-related factors with insulin resistance (IR).

*Methods:* Prospective study of 1614 HIV-infected and 604 HIV-uninfected participants from the Women's Interagency HIV Study between October 2000 and March 2007. Homeostasis model assessment (HOMA)-estimated IR at 11,019 semiannual visits.

*Results:* HIV-infected women reporting highly active antiretroviral therapy (HAART) had higher median HOMA than HIV-uninfected women. Among HIV-infected, cumulative exposure to nucleoside reverse transcriptase inhibitors (NRTIs) of >3 years was associated with HOMA 1.13 times higher than the HOMA without any cumulative NRTI exposure. Cumulative exposure to the NRTI stavudine of >1 year was associated with HOMA 1.15 times higher than the HOMA without any cumulative stavudine use. Family history of diabetes, hepatitis C virus seropositivity, higher body mass index, or reporting menopause was associated with higher HOMA.

*Conclusion:* Longer cumulative exposure to NRTI; in particular, stavudine is associated with greater insulin resistance in HIV-infected women.

*Tien P.C et al J Acquir Immune Defic Syndr. 2008 Dec 1; 49(4): 369-76*

### **Breastfeeding in HIV-positive mothers in Botswana did not affect mortality**

A controlled, randomised, prospective trial of 1200 HIV-positive mothers in Botswana found no differences in mortality between women who breastfed and those who formula fed. A trend toward faster declines in CD4 cell count began to emerge several years after cessation of breastfeeding, but this was not statistically significant and its significance is unknown.

*Lockman S et al. The effect of breast feeding vs formula feeding on maternal HIV disease progression, mortality, and micronutrient levels in a 1200-person randomized trial, Botswana. Sixteenth Conference on Retroviruses and Opportunistic Infections, Montréal, abstract 176, 2009. From *aidsmap news*: February 24th 2009 [aidsmapnews@nam.org.uk](mailto:aidsmapnews@nam.org.uk)*

### **ART use in mothers with low CD4 cell counts reduces breastfeeding transmission fivefold: Malawi**

The use of antiretroviral therapy (ART) by breastfeeding mothers greatly reduced the risk of HIV transmission to their infants after a 14-week course of infant HIV prophylaxis was stopped, according to a study performed in Malawi and presented to the Sixteenth Conference on Retroviruses and Opportunistic Infections. However, ART use did not significantly reduce transmission risk in mothers with CD4 cell counts above 250 cells/mm<sup>3</sup>.

*From *aidsmap news*: February 24th 2009  
[aidsmapnews@nam.org.uk](mailto:aidsmapnews@nam.org.uk)*

### **Association of HIV and malaria with mother-to-child transmission, birth outcomes, and child mortality**

The objective was to assess the impact of HIV and malaria coinfection on mother-to-child HIV transmission (MTCT) and adverse birth outcomes. 109 HIV-positive mother-infant pairs with a malaria diagnosis were identified in a community cohort (Uganda) and followed up postpartum. Maternal malaria was diagnosed by a rapid immunochromatographic test on sera and histopathologic examination of placenta. Infant HIV was diagnosed within 6 weeks of birth using polymerase chain reaction to capture in-utero and intrapartum HIV transmission. Log binomial models were used to assess the relative risk of MTCT, low birth weight, and preterm birth associated with malaria.

Approximately 17.4% of infants were HIV positive at or around birth, and the prevalence of serologic and placental malaria were 31% and 32%, respectively. HIV-positive mothers with serological ICT malaria were significantly more likely to have low-birthweight infants, and low-birth-weight infants had significantly higher risk of MTCT compared with infants of normal birth weight.

Although placental and serologic ICT malaria were significantly associated with MTCT, after adjusting for maternal HIV viral load, the risk of MTCT was significantly increased only for mothers coinfecting with placental malaria (relative risk = 7.9, P = 0.025).

Placental malaria increases the risk of MTCT after adjustment for viral load. Programs should focus on enhanced malaria prevention during pregnancy to decrease the risk of adverse birth outcomes and MTCT. *Brabmbhatt H et al. Acqu Immune Defic Syn, 2008 Apr 1; 47(4): 472-6.*

### **Information needs of health care workers in developing countries: a literature review with a focus on Africa**

Health care workers in developing countries continue to lack access to basic, practical information to enable them to deliver safe, effective care. This paper provides the first phase of a broader literature review of the information and learning needs of health care providers in developing countries. A Medline search revealed 1762 papers, of which 149 were identified as potentially relevant to the review. Thirty-five of these were found to be highly relevant. Eight of the 35 studies looked at information needs as perceived by health workers, patients and family/community members; 14 studies assessed the knowledge of health workers; and 8 looked at health care practice. The studies suggest a gross lack of knowledge about the basics on how to diagnose and manage common diseases, going right across the health workforce and often associated with suboptimal, ineffective and dangerous health care practices. If this level of knowledge and practice is representative, as it appears to be, **it indicates that modern medicine, even at a basic level, has largely failed the majority of the world's population. The information and learning needs of family caregivers and primary and district health workers have been ignored for too long. Improving the availability and use of relevant, reliable health care information has enormous potential to radically improve health care worldwide.**

*Neil M Pakenham-Walsh and Frederick Bukachi Information needs of health care workers in developing countries: a literature review with a focus on Africa. Human Resources for Health 2009, 7:30doi:10.1186/1478-4491-7-30. FULL TEXT at: <http://www.human-resources-health.com/content/pdf/1478-4491-7-30.pdf>*

### **For your resource centre**

#### **Resources related to HIV and AIDS**

- **Adult HIV, Perinatal HIV and Childhood HIV** are three of the books published by **Electric Book Works Healthcare**, South Africa. EBW books can be downloaded for free or purchased online. They aim to give simple, high-quality, self-teaching materials for nurses, doctors and students. Clear learning objectives help you understand the most important lessons to be learned. Theoretical knowledge is presented in an easy, problem-solving way. Clear, step-by-step guides through definitions, causes, diagnosis, prevention, dangers and management. Case studies in story-form let you apply your new knowledge to solve common problems. Multiple choice questions help you monitor your progress. Other titles include **Child Health Care, Mother and Baby Friendly Care, Primary Newborn Care and Saving Mothers and Babies**. EBW e-books can be downloaded and hard copies purchased at <http://www.ebwhealthcare.com>
- **Alleviating the Burden of Responsibility: Report on a Study of Men as Providers of Community-Based HIV/AIDS Care and Support in Lesotho**. This study demonstrates a range of perspectives about gender and HIV/AIDS care from those participating in and potentially affected by health care initiatives, and makes recommendations for increasing the number of male community-based providers of HIV/AIDS care. View the complete version at [http://www.capacityproject.org/images/stories/files/study\\_of\\_men\\_as\\_providers\\_of\\_care\\_lesotho.pdf](http://www.capacityproject.org/images/stories/files/study_of_men_as_providers_of_care_lesotho.pdf)

- **Nursing Care of Patients with HIV/AIDS**, published by **Family Health International**, is a package of training materials for nurses who care for patients with HIV/AIDS. The course provides nurses in resource-limited areas with evidence-based knowledge they can use to deliver safe, effective nursing care to their patients. The materials include a facilitator's guide with PowerPoint slides and a participant's guide. They are available online at <http://www.fhi.org/training/en/HIVAIDS/NCPGuide/index.htm> (or google the title) or email [aidspubs@fhi.org](mailto:aidspubs@fhi.org) to order print copies. See the FHI website at [aidspubs@fhi.org](http://www.fhi.org) for other publications.

*Thanks to Ritva Niemi in Tanzania for recommending these materials.*

- **Nutrition and HIV/AIDS: A Training Manual for Nurses and Midwives**

<http://www.pronutrition.org/pubview.php/111>

This manual aims to provide nursing students with the knowledge and skills needed for nutrition care and support of PLHIV. It is organized into three parts. Part I includes introductory sessions with basic information about HIV and nutrition. Part II aims to build technical knowledge of nurses. Part III provides guidance on nutrition care for clients at different stages of the life cycle. While designed for pre-service training, the manual can also be used for in-service training.

*Developed by the East, Central and Southern African Health Community (ECSA-HC), FANTA and LINKAGES Projects with funding from USAID/East Africa*

- **Nutrition Care for People Living with HIV and AIDS: Training Manual for Community and Home-Based Care Providers; Facilitators Guide and Participant Handouts**

<http://www.pronutrition.org/pubview.php/113>

<http://www.pronutrition.org/pubview.php/112>

These publications are designed to equip community and home-based care providers with sufficient knowledge and skills to provide nutrition care to PLHIV as part of ongoing services. The materials are designed for training providers who do not have extensive education or technical knowledge. Topics include the relationship between nutrition and HIV, assessment of nutritional status, methods for improving food intake, management of HIV and AIDS complications, managing food and drug interactions, care for HIV-positive women and children, food and water safety and hygiene, and principles of counselling and networking.

*Developed by RCQHC and the FANTA Project with funding from USAID/East Africa.*

- **HIV Prevention among Vulnerable Populations: The Pathfinder International Approach**

provides background on the risks faced by populations especially vulnerable to HIV/AIDS. It outlines strategies effective in prevention of HIV/AIDS among sex workers, men who have sex with other men, and injecting drug users. Programs described include peer education, provision of comprehensive health services and quality treatment, provider referral networks, and in-service training and sensitization. Find the document under [http://www.pathfind.org/Pubs\\_AIDS](http://www.pathfind.org/Pubs_AIDS). To request hard copies email [tech-comm@pathfind.org](mailto:tech-comm@pathfind.org).

*Israel E, Landari C & Simonetti C. 2008 Pathfinder International, Technical Guidance Series Number 6*

- **Nutrition, Food Security and HIV: Compendium of Promising Practices**

<http://www.pronutrition.org/pubview.php/114>

Increasingly, countries in eastern, central and southern Africa are integrating nutrition and food security interventions into HIV services. The Regional Centre for Quality of Health Care (RCQHC) in Uganda and the FANTA Project organized extensive in-country reviews by local teams of nutrition, food security and HIV programs in Kenya, Malawi, Tanzania, Uganda, and Zambia. This publication analyzes and describes the promising practices identified through these reviews. RCQHC 2008 Published by AED, Washington, DC

- **Nutrition Counselling for Pregnant mothers in Tanzania.** The module is intended to contribute to improved quality of nutritional counselling for both HIV+ and HIV-women using antenatal care services. It is designed to be integrated into or be delivered as part of focused antenatal care training, and can be used in pre-service, in service, and refresher training, in classroom sessions and for clinical practice. See <http://www.pronutrition.org/pubview.php/111> By *Eleonore Fosso Seumo, ACCESS Program and Fatma Abdallah, TFNC Tanzania. USAID and ACCESS /JHPIEGO 2008*

#### **Resources related to diabetes**

- **International Journal of Diabetes in Developing Countries** at [www.ijddc.com](http://www.ijddc.com) is an Open Access journal produced by **Research Society for the Study of Diabetes in India.**
- **National Diabetes Information Clearing-house** at <http://diabetes.niddk.nih.gov> gives materials on diabetes facts, treatments, statistics, and reports for health professionals, people with diabetes, and the general public. Publications may be downloaded or ordered online, free of charge. *The site is supported by the US National Institutes of Health.*
- **Diabetes prevention and care pamphlets**  
Patient-focused pamphlets on diabetes prevention and care, including basic food guides and care of the feet, are available in PDF format at [www.dptresources.org.nz/res1.html](http://www.dptresources.org.nz/res1.html). *Diabetes Projects Trust-New Zealand.*

#### **Other resources**

- **The Uganda Continuing Medical Education Newsletter November-December 2008 Issue 54** includes the following articles:
  - The challenges facing young people
  - Acute Retroviral Illness
  - Dengue Fever – from Capricorn to Cancer
  - Cholera
  - Sterile pyuria
  - Rotavirus – a nasty little cause of diarrhoea
  - Norovirus (Norwalk virus) – another one!
  - Signs of dehydration in childrenTo request an e-copy of this and other Uganda CME newsletters, email Dr David Tibbutt at [david@tibbutt.co.uk](mailto:david@tibbutt.co.uk)
- **PLoS Medicine** <http://www.plosmedicine.org> and **PLoS Neglected Tropical Diseases** <http://www.plosntds.org> are open access journals published by PLoS (the Public Library of Science <http://www.plos.org>). PLoS's mission is to make medical literature freely accessible. All articles are peer-reviewed.
- **UNICEF** has launched a new **Childinfo** website <http://www.childinfo.org/index.html>, which presents the latest statistical information on children and women - including data from 'The State of the World's Children 2009'.
- **The IYCN Update** is a periodic email newsletter from **USAID's Infant & Young Child Nutrition (IYCN) Project** giving updates on maternal, infant, and young child nutrition for global health professionals. Distributed four times per year, each issue includes research highlights, new resources, and IYCN Project news. The first issue covers nutrition research summaries, a commentary on early HIV testing and infant feeding, and more. View the newsletter: <http://tinyurl.com/co7c99>.
- **African Medical and Research Foundation (AMREF)** has just published **Clinicians' Guide to Quality Outpatient Diagnosis** by Jane Carter. The manual is for clinicians working in outpatient curative clinics in primary level hospitals and health centres in sub-Saharan Africa. It covers: quality outpatient diagnostic services; clinical examination and use of laboratory and other investigations; an approach to commonly presenting conditions in outpatient practice; and an approach to disease

outbreaks. Other 2009 publications by AMREF are: **Standard Operating Procedures - Essential Laboratory Tests; Standard Operating Procedures - Laboratory Utilization for clinicians; Standard Operating Procedures - Care and Maintenance of Laboratory Equipment; Quality Manual - clinical and Laboratory Diagnostic Services** and **Guidelines on Specimen Collection, Storage and Transportation**. All these can be ordered from AMREF Health Learning Materials Unit (P.O. Box 27691 - 00506, Nairobi, Kenya) or online at [www.amref.org](http://www.amref.org).

- **Hypertension Research Editor's Choice** at [www.nature.com/hr/focus/editors\\_choice](http://www.nature.com/hr/focus/editors_choice) is a collection of open-access, award-winning articles on hypertension, cardiovascular disease and metabolic syndrome.
- **Otitis Media - Focusing on the Developing World** by Titus S Ibekwe and Onyekwere G Nwaorgu is in **Surgery in Africa Monthly Reviews April 2009** and available at [www.ptolemy.ca/members](http://www.ptolemy.ca/members) On this website are archives of previous reviews since July 2005, details of the CME process providing MOC credits from the Royal College of Physicians and Surgeons of Canada, a Resource Library and links to an international discussion group.