Reports and Resources

This section gives relevant clinical information from other journals and reports, and suggests materials that can be freely downloaded, and/or obtained in hard copy or on CD. Items are grouped under: Chronic diseases; HIV and other infections; Paediatrics/child health; Surgery; General resources.

Please look out for other publications to include in this section. Send them to Dr Wani Mena wanimena@gmail.com **or Dr Eluzai Hakim** eluzai_hakim@yahoo.co.uk.

Chronic diseases

Neglected cardiovascular diseases in Africa: Challenges and opportunities

Several medical conditions that affect the cardiovascular system are unique to Africans, but structured control programs have not been systematically researched. Among the causes of the emergence of CVD burden in Africa are rapid urbanisation, lack of physical activity, increasing obesity and hypertension, high-salt intake and diets high in cholesterol, smoking tobacco, and increasing diabetes, combined with increasing life-expectancy. Despite the huge disease burden on the continent, the epidemiology of diseases such as rheumatic valve disease, cardiomyopathies, and tuberculous pericarditis has been neglected; natural histories of the diseases are often incompletely described, and aetiology and pathogenesis of the diseases also remain unclear. This has led to stagnation in medical care for patients, and absence of effective preventive measures.

Multidisciplinary strategies should be used to increase research aimed at improving knowledge of epidemiology, mechanisms, and management of neglected cardiovascular diseases including:

- Building research capacity in health sciences in Africa through North-South collaboration projects led by local investigators.
- Designing projects that involve collaboration between African institutions.
- Prioritising research into these molecular mechanisms of cardiovascular diseases that are unique to Africa.
- Evolving innovative management strategies tailored to the African setting.
- Understanding the scientific and lay aspects of traditional medicine that might have implications in the health status of the communities.

See Neglected cardiovascular diseases in Africa: Challenges and opportunities A Mocumbi, M Ferreira. J Am Coll Cardiol, 2010; 55:680-687 (open access)
http://content.onlinejacc.org/cgi/content/full/55/7/680

Heavy drinking increases cardiovascular disease risk for men with HIV. US investigators report that "Hazardous drinking (more than 14 alcoholic drinks/week), and alcohol abuse or dependence were significantly associated with an increased prevalence of cardiovascular disease as compared with infrequent or moderate drinkers. The effect of alcohol may be more pronounced among those infected with HIV".
The association was still present when they took into account traditional risk factors for such illnesses and the patients' HIV-related characteristics. It is possible that alcohol is related to a number of health problems in people with HIV - including poor adherence to antiretroviral treatment and liver disease.
For both HIV-positive and HIV-negative men, traditional risk factors such as age, cholesterol, high blood pressure, and smoking were also significantly associated with an elevation in the risk of cardiovascular disease
Freiberg MS. The association between alcohol consumption and prevalent cardiovascular diseases among HIV-infected and HIV-uninfected men. J Acquir Immune Defic Syndr (online edition), 2009.

Diabetes takes disproportionate toll in Africa

According to data from researchers in 5 African countries who interviewed 4,600 men and women, half of whom were diabetic:

- Africans with diabetes have triple the rates of heart disease, stroke, kidney disease, and heart failure than their counterparts in other countries, and
- More tuberculosis, HIV/AIDS, and malaria.

More than half reported they could not buy all the medicines they needed, and 20% were not able to buy food because of their medical expenses. Preliminary results also indicated that 15% of family members had to quit work to care for a relative with diabetes and 15% had to work more to assist with the cost of care.
See "People in developing countries pay more for diabetes care and have poorer health results" Diabetes Voice December 2009; 54(3):12. http://www.diabetesvoice.org/files/attachments/2009_3_Final.pdf

Overweight and obesity in urban Africa: A problem of the rich or the poor?

There is now a real threat that it will not be long before obesity among urban women reaches epidemic proportions in African countries.

Analysis of data from 7 sub-Saharan African countries confirmed that women of higher socio-economic levels were more likely to be overweight or obese than their poorer counterparts. Similarly, women engaged in income-generating activities were more likely to be overweight. However the speed of increase in obesity was found to be higher among the poorest group as compared to the richest group. This is probably because of changing nutritional and lifestyle trends - people living in urban areas are eating more refined and energy-dense foods and have very little physical activity.

In most African cultures, big is considered beautiful and a sign of wealth. Other factors associated with a higher risk of obesity include genetic predisposition, metabolic disorders, gender, and environmental factors.

While poverty and social exclusion are likely to increase the risks of developing a chronic disease, the poor are also more likely to develop and die of its complications due to their inability to afford treatment and care.

See: Overweight and obesity in urban Africa: A problem of the rich or the poor? AK Ziraba, JC Fotso, R Ochako. BMC Public Health 2009.

http://www.biomedcentral.com/content/pdf/1471-2458-9-465.pdf

Twenty percent of adolescents use smokeless tobacco in Republic of Congo

18% of 3,034 in-school adolescents reported using smokeless tobacco (chewing tobacco, sniff or dip) within the past month, with rates for females and males the same. Students who smoked cigarettes were 9 times more likely to also use smokeless tobacco.

[Have you information on the use of sawuut in Southern Sudan?]

See "Current use of smokeless tobacco among adolescents in the Republic of Congo" BMC Public Health 2010, 10:16 (open access) http://www.biomedcentral.com/content/pdf/1471-2458-10-16.pdf.

Public Health 2009, 9:465 doi:10. 1186/1471-2458-9-465, http://www.biomedcentral.com/content/pdf/1471-2458-9-465.pdf

Meta-analysis of studies on salt, stroke, and CVD

The results of this meta-analysis demonstrate a strong and biologically plausible association between a high intake of salt and an increased risk of stroke and other CVD related outcomes in adult men and women. It reinforces the importance of salt in the development of stroke, one of the leading causes of morbidity, functional disability, and mortality throughout the world. Given the excessive presence of sodium in the diets of most developing countries, especially in prepared foods, efforts are needed to work with food companies and food distributors to reduce the amount of sodium contained in many food products.

See Salt intake, stroke, and cardiovascular disease: Meta-analysis of prospective studies by P Strazzullo, L D'Elia, NB Kandala and FP Cappuccio. BMJ 2009; 339:b4567 http://www.bmj.com/cgi/content/abstract/339/nov24_1/b4567

New data suggest that reduction in individual dietary salt intake of 3 grams per day would have approximately the same effect on rates of coronary heart disease events as:

- a 50% reduction in tobacco use
- a 5% reduction in body-mass index among obese adults or
- the use of statins to treat persons at low or intermediate risk for CHD events.

See: Projected effect of dietary salt reductions on future cardiovascular disease by K Bibbins-Domingo et al. N Eng J Med. 20 January 2010.

http://content.nejm.org/cgi/content/full/NEJMoa0907355v1

Stroke website at http://www.cdc.gov/stroke/

This is a new website launched by the US Centers for Disease Control and Prevention. It gives free downloadable educational materials for public health and health care professionals and patients, and compilation of journal articles and well-illustrated guidelines/recommendations.

Arbor Clinical Nutrition Update #319: Stroke prevention and nutrition

This looks at the role of nutrition in the prevention of stroke and considers a wide range of nutrients, such as antioxidants, fat, salt and other minerals, as well as dietary patterns like the Mediterranean diet.

The Arbor Clinical Nutrition Updates is an electronic publication, describing and commenting on current nutrition research and topics and is a free service to health professionals and students. The Updates are distributed by email or can be downloaded. To receive the Updates subscribe at:

www.nutritionupdates.org/sub/sub01.php?item=2. Or send email to upD@arborcom.com giving: your name, email address, the country where you live and your profession.

HIV and other infections

Daily co-trimoxazole prophylaxis in severely immunosuppressed HIV-infected adults in Africa started on combination antiretroviral therapy: an observational analysis of the DART cohort.

The results reinforce WHO guidelines and provide strong motivation for provision of co-trimoxazole prophylaxis for at least 72 weeks for all adults starting combination ART in Africa.
AS Walker, D Ford, CF Gilks, P Munderi, F Ssali, A Reid, E Katabira, H Grosskurth, P Mugyenyi, J Hakim, JH Darbyshire, DM Gibb, AG Babiker. The Lancet, Volume 375, Issue 9722, Pages 1278 - 1286, 10 April 2010.
Note: Professor James Hakim is on the Editorial Team of this journal

Diagnosis and management of antiretroviral-therapy failure in sub-Saharan Africa: challenges and perspectives

Despite the enormous progress made in scaling up antiretroviral therapy (ART) in sub-Saharan Africa, many challenges remain, not least of which are the identification and management of patients who have failed first-line therapy. Less than 3% of patients are receiving second-line treatment at present, whereas 15—25% of patients have detectable viral loads 12 months or more into treatment, of whom a substantial proportion might have virological failure. This paper discusses the reasons why virological ART failure is likely to be under-diagnosed in the routine health system, and the current difficulties with standard recommended second-line ART regimens. The development of new diagnostic tools for ART failure, in particular a point-of-care HIV viral-load test, combined with simple and inexpensive second-line therapy, such as boosted protease-inhibitor monotherapy, could revolutionise the management of ART failure in resource-limited settings.
See Lancet Infectious Diseases, vol 10 issue 1 p60-65 January 2010

Integrating TB and HIV services: lessons from the field

This edition of **HIV & AIDS Treatment in Practice (HATIP) #156** looks at recent research on how HIV care is delivered in TB services, and considers the need for closer integration of TB and HIV services. The HATIP newsletter examines examples of successful integration, with a particular focus on the practical organisation of services and workforce to achieve higher rates of diagnosis, TB cure and retention in long-term HIV care.
For further information see http://www.aidsmap.com/hatip and http://www.aidsmap.com/cms1397718.asp

Recent WHO recommendations are that all HIV-infected people diagnosed with TB should receive antiretroviral therapy, and that it should begin while patients are still receiving TB treatment (see http://www.who.int/tb/challenges/hiv/factsheet_hivtb_2009update.pdf

HIV and AIDS Treatment and Practice (HATIP) is a regular free electronic newsletter for health care workers and community-based organisations on HIV treatment in resource-limited settings. *See http://www.aidsmap.com/hatip*

The World Malaria report 2009

This found that increased international funding has resulted in a dramatic scale up of malaria control interventions in several countries and measurable reductions in malaria burden. The report noted that:

- More African households (31%) own at least one insecticide-treated net (ITN), and more children under 5 years of age used an ITN in 2008 (24%) compared to previous years.
- Use of artemisinin-based combination therapies (ACTs) is increasing but remains low in most African countries with fewer than 15% of children with fever receiving an ACT.
- More than one-third of the 108 malarious countries documented reductions in malaria cases of more than 50% in 2008 compared to 2000.
- Where scale-up of proven interventions has occurred, and surveillance systems are functioning, remarkable impact has been documented.

Parasite resistance to anti-malarial medicines and mosquito resistance to insecticides are major threats to achieving global malaria control. Key elements to prevent the spread of drug resistance include:

- Rapidly reducing the spread of malaria using malaria preventive tools.
- Ensuring that all malaria infections are correctly diagnosed, effectively treated and followed-up.
- Stopping the marketing and use of oral artemisinin monotherapies.
- Carefully monitoring the efficacy of medicines to detect early evidence of resistance.

The World Malaria Report 2009 at

http://www.who.int/malaria/world_malaria_report_2009/en/index.html

WHO Guidelines for the treatment of malaria 2nd edition, 2010. The Guidelines aim to provide simple and straightforward treatment recommendations based on sound evidence that can be used in severely resource-constrained settings. *Order from WHO at bookorders@who.int Number 11502662 Price Swiss francs 14.00 for developing countries 194 pages, See details at http://apps.who.int/bookorders/anglais/detart1.jsp?sesslan=1&codlan=1&codcol=15&codcch=2662*

International Union against Tuberculosis and Lung Disease

The mission of the Union is to address health challenges in low- and middle-income populations. With nearly 10,000 members and subscribers from 145 countries, The Union has its headquarters in Paris and regional and country offices serving the Africa and other regions. Its scientific departments focus on **tuberculosis, HIV, lung health and non-communication diseases, tobacco control and research.** The Union has developed programmes for TB-HIV, asthma, and pneumonia in children under five years of age, and tobacco control. The emphasis is on providing health solutions for the poor.

For more information and useful links to publications and related organisations see http://www.theunion.org.

For example see **Technology, Research, Education and Technical Assistance for Tuberculosis (TREAT TB)** at www.treattb.org.

Paediatrics/Child Health

Fourth Edition of 'Facts for Life'

This well known handbook provides vital messages and information for mothers, fathers, other family members and caregivers and communities to use in changing behaviours and practices that can save and protect the lives of children and help them grow and develop to their full potential.

This new version builds on the three previous editions, *Newborn Health* has been added to the *Safe Motherhood* chapter and a new chapter, *Child Protection*, has been included.

Facts for Life is written in easy-to-understand language. Users are encouraged to find new ways to use its messages and so help families and communities to realise the rights of children and women everywhere.

Download **Facts for Life** (in Word or pdf) from http://factsforlife.org or buy the hard copy through http://factsforlife.org/00/text.html (price US$15). The website also gives background documents and video clips.

The 4th edition of Facts for Life was published by UNICEF, WHO, UNESCO, UNFPA, UNDP, UNAIDS, WFP and the World Bank in April 2010.

Nutrition in Emergencies Regional Training Initiative

The new website of this Training Initiative is on-line at: http://www.nietraining.net and gives information about new courses in emergency nutrition. The intensive 6- and 12-day courses aim to equip participants with the expertise needed to lead or support nutrition responses. They are intended to build the skills of anyone who has an involvement with emergency nutrition, including health and food security staff, and general programme managers. The next course for the Africa Region will be in January 2011 at Makerere University School of Public Health. Visit the website for more information.

Revised WHO recommendations on HIV and infant feeding

Recent studies have found that antiretroviral (ARV) treatment provided to either the HIV-infected mother or the HIV-exposed infant can substantially reduce the risk of post-natal transmission of HIV through breastfeeding. The revised WHO Guidelines on **Infant feeding in the context of HIV** give 8 key principles and 7 key recommendations were developed for these guidelines.

The key principle is that infant feeding practices by HIV-infected mothers should support the greatest likelihood of HIV-free survival of their children and not harm the health of mothers. This principle is meant to balance the risk of infants acquiring HIV through breast milk with the higher risk of dying from other causes, such as diarrhoea and lower respiratory tract infections, due to the bigger risk of these non-HIV related diseases among infants who are not breastfed.

The 7 key recommendations are summarised, as follows:

1. HIV-infected mothers should be provided with lifelong ART's or antiretroviral prophylaxis interventions to reduce HIV transmission through breast milk. The mother should receive:
   - AZT during pregnancy, and the infant should receive daily Nevirapine from birth until the cessation of breastfeeding *or*
   - A 3-drug regimen during pregnancy, and this maternal regimen should be continued until the cessation of breastfeeding.

2. HIV-infected mothers whose infants are uninfected (or of unknown HIV status) should exclusively breastfeed for the first 6 months. After this appropriate complementary foods should be introduced. Breastfeeding should continue through 12 months of life, and should be stopped only after nutritionally adequate and safe dietary alternatives can be provided.
3. Abruptly stopping breastfeeding is not advised. HIV-infected mothers who decide to stop breastfeeding should gradually stop over approximately one month. If the mother or child has been taking prophylaxis medications, this treatment should continue for at least one week after stopping breastfeeding.
4. Infants of HIV-infected mothers who stop breastfeeding should be provided with safe and adequate replacement feeds.
5. HIV-infected mothers with uninfected infants (or infants with unknown HIV status) should only give commercial infant formula milk as a breast milk replacement if the milk replacement is: affordable, feasible, acceptable, sustainable, and safe (AFASS).
6. HIV-infected mothers should consider expressing and heat-treating breastmilk as an interim strategy in special circumstances. For example, to help with stopping breastfeeding or if ART is temporarily unavailable.
7. HIV-infected children should be exclusively breastfed for the first 6-months of life, and continue breastfeeding up to 2-years or beyond.

See Rapid advice: use of antiretroviral drugs for treating pregnant women and preventing HIV infection in infants. November 2009. *Download at http://www.who.int/hiv/pub/mtct/advice/en/index.html* and **Rapid advice: revised WHO principles and recommendations on infant feeding in the context of HIV.** November 2009. *Download at http://www.who.int/child_adolescent_health/documents/9789241598873/en/index.html* and http://www.who.int/hiv/topics/mtct/.

World Health Organisation's strategic vision for preventing mother-to-child transmission of HIV

The report makes special mention of the major role which community health workers can play in this area. It says, "...community health workers play an important role in increasing the uptake of PMTCT services by providing information on access to services, expanding treatment literacy related to the use of ARVs, supporting treatment preparedness and adherence, and encouraging positive prevention and disclosure of HIV status".
http://www.who.int/hiv/pub/mtct/strategic_vision/en/index.html

Management of severe pneumonia in Malawi

Standard case management of pneumonia can reduce overall child mortality, provided it is delivered effectively. The government of Malawi has introduced a national programme for the delivery of standard case management for pneumonia in children. This article describes the development, scale-up, and achievements of this programme, which is based on a successful anti-tuberculosis service delivery model, and discusses the challenges facing the implementation of this adapted service delivery model.
See Development and Implementation of a National Programme for the Management of Severe and Very Severe Pneumonia in Children in Malawi. P. Enarson, R. Gie, D. Enarson, C. Mwansambo. Health in Action, published 10 Nov 2009. PLoS Medicine. doi:10.1371/journal.pmed.1000137 at
http://www.plosmedicine.org/article/info%3Adoi%2F10.1371%2Fjournal.pmed.1000137

Diarrhoea: Why children are still dying and what can be done A report and website from WHO and UNICEF at *http://7pointplan.org*

Nearly one in five child deaths - about 1.5 million each year - is due to diarrhoea. It kills more young children than AIDS, malaria and measles combined. Today, only 39 per cent of children with diarrhoea in developing countries receive the recommended treatment. This user-friendly report and website examines the latest available information on the distribution of childhood diarrhoea and sets out a 7-point plan that includes:

Treatment package

1. Fluid replacement to prevent dehydration.
2. Zinc treatment.

Oral rehydration therapy is the cornerstone of fluid replacement. New elements of this approach include low-osmolarity ORS, which are more effective at replacing fluids than the previous ORS formulation, and zinc treatment, which decreases diarrhoea severity and duration. Important additional components of the package are continued feeding, including breastfeeding, during the diarrhoea episode and use of appropriate fluids available in the home if ORS is not available.

Prevention package

1. Rotavirus and measles vaccinations.
2. Promotion of early and exclusive breastfeeding and vitamin A supplementation.
3. Promotion of handwashing with soap.
4. Improved water supply quantity and quality, including treatment and safe storage of household water.
5. Community-wide sanitation promotion.

New aspects of this approach include rotavirus vaccination and new more-effective approaches to stop open defecation.

See also: Diarrhoea: why children are still dying and what can be done Wardlaw T, Salama P, Brocklehurst C, Chopra M & Mason E. The Lancet, Early Online Publication, 14 Oct2009 http://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61798-0/fulltext

Diarrhoea in children with HIV: 8-page clinical review

This review by Theo Smart looks at the management of diarrhoea in children with HIV. It covers:

- Causes of diarrhoea
- Types of diarrhoea, and how to assess and classify diarrhoea in children
- Management of dehydration
- Treatments for diarrhoea
- Approaches to prevention

See HIV and AIDS Treatment and Practice (HATIP) #157 (15 April 2010) www.aidsmap.com/cms1405890.asp

Surgery

Surgery in Africa Monthly Reviews

These reviews are available free at www.ptolemy.ca/members

Examples of recent ones are:

- December 2009 Review, **"Injuries to the Diaphragm"**
- February 2010 **"Acute Septic Arthritis and Osteomyelitis in Children - An African Perspective"**
- April 2010 **"Cryptorchidism - a comprehensive clinical review".**

Also at this site are archives of reviews since 2005 and a resource library.

General resources

Africa Health Journal

This journal is now available on an open access basis at a **new website** -see http://www.africa-health.com. For over 30 years **Africa Health** has been a leading source of clinical and managerial information for health professionals from across Africa (see example of the contents of the March 2010 issue below). Available at the same site are the peer-reviewed sister journals, the **African Journal of Diabetes Medicine** and the **African Journal of Respiratory Medicine**.

Example of contents of March 2010 issue of Africa Health:

- **Malaria:** Magic bullets and damp squibs: current state of drug resistance
- **TB:** Improving patient follow-up in a large urban setting: a case study from Kampala
- **Family Health:** Integrating family planning and HIV services. Research from Africa is leading way
- **Pneumonia:** review diagnosis, aetiology and severity in adult community acquired pneumonia. A practical guide for health workers".

Reference Books from Doctors Without Borders/Médecins Sans Frontières (MSF)

The following recent books are available to download in pdf format from http://www.refbooks.msf.org:

- Essential Drugs – 2010
- Clinical guidelines – 2010
- Management of epidemic meningogoccal meningitis – 2008
- Obstetrics in remote settings – 2007
- Tuberculosis – 2010

Note that to download and distribute these books you need permission from MSF International Technical Coordination itc@msf.org

You can buy the books from Teaching-aids At Low Cost (TALC) – see www.talcuk.org/featured-publishers/msf.htm

Where there is no doctor – download, or buy the CD or book.
You can download free high- and low-resolution pdfs of **Where There is No Doctor** at www.hesperian.org/publications_download_wtnd.php. The CD-ROM costs US$16.00 and the book is US$22.00. See more details at www.hesperian.org/index.php under 'Publications and Bookstore'.

The Global Health eLearning Center (USAID)
Four new courses have been published:
- Human Resources for Health Basics
- Newborn Sepsis
- Community-Based Family Planning
- FP/RH for People Living with HIV

See www.globalhealthlearning.org to take these new courses or any of the 33 courses available on the site.

Selected Health Information Resources for Africa at www.netvibes.com/phijean
This site lists selected English-language health information resources which those running a resource centre in Africa might find useful. It gives links to sources of relevant books, websites and other online lists of materials. Some of the resources are free of charge to low-income countries only; others are free of charge to everyone; and, for a few, payment may be necessary by subscription or at the point of use unless the institution or consortium of libraries has obtained access rights.
This site has been created by Partnerships in Health Information http://www.partnershipsinhealthinformation.org.uk