

## Obstacles to treat HIV/AIDS

Tom Lawson investigates the chronic lack of trained medical and community staff needed to treat the HIV/AIDS epidemic

The World Health Organisation plans to have three million people taking anti-retroviral therapy by the end of 2005. But the so-called "3 by 5" target can only be reached if huge numbers of health care workers are trained in anti-retroviral care.

There is a dire need for trained staff. Doctors need to diagnose and manage patients' symptoms, nurses have to support and help patients after initial contact with doctors and a full range of trained healthcare team members must be ready to respond to the particular challenges of the disease.

At a recent conference in Cape Town, delegates and all experts agreed that the training need is enormous worldwide.

### Empowering all health care workers to support anti-retroviral treatment

The 3 by 5 target can only be achieved if anti-retroviral treatment becomes a normal part of primary health care. Staff in local health centres need guidelines on how to prepare patients for treatment, how to monitor them

once a doctor has prescribed drugs and how to spot dangerous side effects or failing treatment.

To achieve this, the World Health Organisation has developed a list of clinical competencies that health care workers will need to take part in the care of people with HIV. It has called on trainers and governments to make sure that all health care workers learn these basic skills.

### A training toolkit for all healthcare staff

The National Aids Manual or NAM, which provides HIV information worldwide, has published *Treating HIV & AIDS: A Training Toolkit*. It developed the training resource with the help of doctors working in Botswana and with ActionAid doctors in Kenya.

Crucially, NAM hopes the toolkit will be useful to all healthcare professionals and not just doctors.

Dr Jeanne Raisler of Michigan University, USA, has coordinated nursing and midwifery training in African countries for a number



of years. She has just finished training nurses in Tanzania.

Dr Raisler is worried that most training materials are exclusively focused at doctors and not at nurses, who will be delivering most of the care. "There is the idea that the physicians are going to start and monitor the patients on the drugs but it's not going to happen," she said.

"Once a doctor has diagnosed and prescribed the drugs they are

unlikely to see them again until they become ill, and maybe not even then. In many places it will be nurses and community health workers who deliver the first line of care."

Doctors who lead healthcare teams need to be trained, but Dr Raisler believes that it is important for nurses to support patients to understand the medicine, side effects and toxicity resistance.

If patients are not supported through the unpleasant side effects they are likely to get, but which often pass or can be managed, she is worried that people will simply stop taking their treatment.

The HIV in their bodies will consequently become resistant to drugs and they will be more likely to die or even pass a resistant virus onto someone else.

"One of the most important

ways in which we can help is to train nurses who will deliver the front line in HIV care," she said. "Until now they have received very little education regarding the drugs or how to use them."

NAM's toolkit pays particular attention to the safe use of medication, the importance of adherence and the development of multidisciplinary care.

The toolkit is freely available for adaptation and translation, and a three-year evaluation programme in partnership with Mildmay International is planned in order to develop the resource further.

Further updates and editions will be published in late 2004 and in 2005.

In particular the partners want to learn more about the training needed by the community health workers who will support adherence to treatment, spot dangerous side effects and identify people who need ARV treatment.

For a free copy of NAM's *Treating HIV & AIDS: A Training Toolkit* visit <http://www.aidsmap.com/publications/toolkit/>

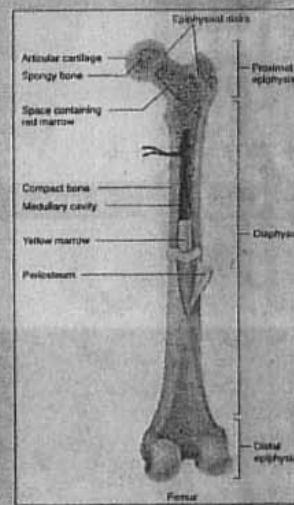
## Low Zinc levels in mother affect baby's bones

The findings from a new study suggest that pregnant women need to have adequate zinc levels to ensure optimal bone growth in their developing baby. Zinc supplements can rectify this problem.

"Maternal zinc deficiency is relatively common in developing countries, but its consequences for fetal growth are not established," Dr. Laura E. Caulfield, of the Johns Hopkins University in Baltimore, and colleagues note in the *American Journal of Clinical Nutrition*. Using ultrasound, the authors tested whether increasing zinc levels in women with a deficiency could improve fetal growth.

The study involved 242 pregnant women from Peru, a country where zinc deficiency is common. Early in pregnancy the women were randomly selected to receive vitamin supplements that did or did not contain zinc.

Fetuses of zinc-treated mothers showed much greater bone growth at the femur or thigh bones, than fetuses of other mothers. The

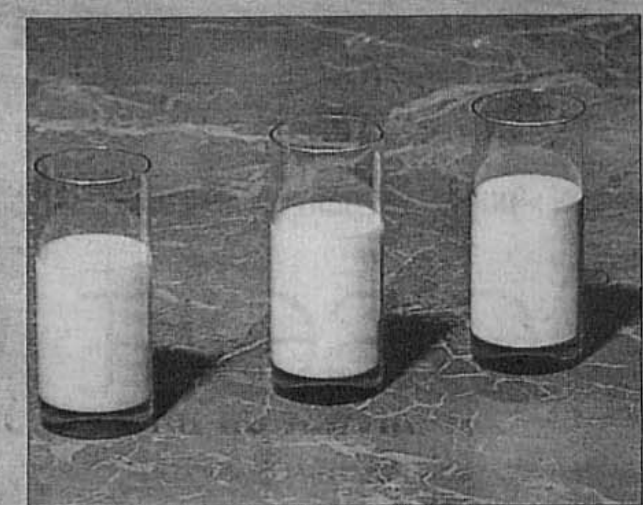


effect of zinc supplementation on femur growth increased with increasing gestational age.

Caulfield said in an interview that "what is unique here is that we were able to detect such effects in human fetuses using ultrasound technology." Our results suggest that maternal zinc levels have an effect on fetal bone growth, she added.

Source: *American Journal of Clinical Nutrition*, May 2004.

## Milk, Calcium intake may lower colon cancer risk



Higher milk and calcium consumption is linked with reduced odds of developing colorectal cancer, according to an analysis of ten studies.

"Our findings, with those from several clinical trials on calcium supplements and colorectal tumors strongly suggest that calcium reduces colorectal cancer risk," Dr. Eunyoung Cho from Harvard Medical School, Boston told.

The studies reviewed by Cho's team involved a total of 534,536 individuals, of whom 492 developed colorectal cancer over a 6 to 16-year period. Dietary information was gathered by questionnaire.

The risk of cancers of the colon and rectum decreased with increasing milk con-

sumption, according to the results published in the *Journal of the National Cancer Institute*. Compared with the lowest category of milk intake, the highest intake was associated with 15 percent reduction in the risk of colorectal cancer.

A higher dietary and total calcium intake also significantly reduced the risk of colorectal cancer, for both men and women, the investigators found.

However, as Cho pointed out, the data for calcium "were suggestive of a threshold effect in which little further reduction in the risk of colorectal cancer was observed for intakes above 1000 milligrams per day."

Source: <http://www.reuters.com>

## New WHO guidelines to promote proper use of alternative medicines

Adverse drug reactions to alternative medicines have more than doubled in three years

Since traditional, complementary and alternative medicines remain largely unregulated, consumers worldwide need to be informed and given the tools to access appropriate, safe and effective treatment. To help address this issue, the World Health Organisation (WHO) released a new set of guidelines for national health authorities to develop context specific and reliable information for consumer use of alternative medicines.

Up to 80 percent of developing country populations rely on traditional medicine for their primary health care, due to cultural tradition or lack of alternatives. In wealthy countries, many people seek out various types of natural remedies on the assumption that natural means safe.

However, as the use of traditional or alternative medicines increases, so do reports of adverse reactions. In China, a country where traditional therapies and products are widely used in parallel with conventional medicine, there were 9,854 known reported cases of adverse drug reactions in 2002 alone, up from 4,000 between 1990 and 1999.

Many traditional/alternative medicine products are sold over the counter. In a WHO survey of 142 countries, 99 responded that most of these products could be bought without prescription. In 39 countries, many traditional remedies were used for self-medication, bought or prepared by friends, acquaintances or the patient. These trends raise concerns over the quality of the products used, their therapeutic appropriateness for a given condition, and the lack of medical follow-up.

"WHO supports traditional and alternative medicines when these have demonstrated benefits for the patient and minimal risks," said Dr LEE Jong-wook, Director-General of WHO. "But as more people use these medicines, governments should have the tools to ensure all stakeholders have the best information about their benefits and their risks."

Accessible, easy to understand information is key to guiding consumers in their choices. The guidelines provide simple, easy to follow tips on issues to look out for and a brief checklist of basic questions which may be

used to help facilitate proper use of traditional and alternative medicine.

Advice is provided to government authorities on preparing easy-to-access information and on working with the mass media to sensitise and educate the population. In addition, suggestions are given for several health system structures and processes needed to promote proper use of traditional and alternative medicines.

While the guidelines cannot compensate for poor products or inappropriate practices, they can help governments educate consumers on how to maximise the benefits and minimize the risks of traditional medicines.

### Alternative therapies - documented benefits and risks

Empirical and scientific evi-

dence exists to support the benefits of acupuncture, manual therapies and several medicinal plants for chronic or mild conditions. For instance, the effectiveness of acupuncture, a popular treatment for relieving pain, has been demonstrated both through numerous clinical trials and laboratory experiments. As a result, 90 percent of pain clinics in the United Kingdom and 70 percent in Germany include acupuncture as a form of treatment. Equally, some medicinal plants have shown efficacy for life-threatening conditions; medicine combinations containing the Chinese herb *Artemisia annua* are now considered amongst the most effective remedies against malaria.

However, there have been many cases of consumers

unknowingly using suspect or counterfeit products; choosing inappropriate therapies in self-care; as well as several reports of unintentional overdose.

Similarly, there have been reports of consumers being injured by unqualified practitioners. In addition, there have been reports of paralysis caused by unqualified manual therapists.

Another potential risk is that patients do not inform their doctors about their use of traditional and complementary medicines. For instance, *Ginkgo biloba* is a popularly used herbal medicine worldwide whose main function is to prevent vascular disease and to increase blood circulation. The WHO Uppsala Monitoring Centre reported some cases of excess bleeding during a surgical operation. If the patient had

products as well as contraindications

- Set up the right channels for consumers to report adverse drug reactions and make those channels known
- Organise communication campaigns to equip consumers with the ability to discern the quality of the service they receive
- Ensure that practitioners are appropriately qualified and registered
- Encourage interaction between traditional and conventional practitioners
- Provide insurance for non-conventional therapies and products whose evidence base is sound.

Health system structures and processes that would help promote better quality and safety

- Development of quality standards and treatment guidelines to ensure uniformity within a particular health system
- Standardisation of training and knowledge requirements for practitioners to promote the credibility of traditional or alternative practices and enhance consumer trust
- Collaboration between conventional and traditional or complementary care providers to improve results of treatment but also promote health sector reform
- Organization of traditional or alternative medicine practitioners to provide better structures for self-control mechanisms

Questions consumers should ask

- Is the therapy suitable for his/her disease or condition?
- Does the therapy have the potential to prevent, alleviate and/or cure symptoms or in other ways contribute to improved health and well-being for the consumer?
- Is the therapy or herbal medicines provided by a qualified traditional medicine/ complementary and alternative medicine practitioner (TM/CAM) or health care practitioner with adequate training background, good skills and knowledge, preferably registered and certified?
- Are the herbal medicinal products or materials of assured quality and what are the contraindications and precautions of the products or materials?
- Are the therapies or herbal medicinal products available at a competitive price?

WHO guidelines on developing consumer information on proper use of traditional, complementary and alternative medicines

Policies governments could put in place

- Make sure that sufficient information is provided to consumers on the efficacy and safety of



informed the doctor about the use of the medicine this could have been avoided.

The development of the guidelines was carried out with the financial and technical support of the Regional Government of Lombardy, in collaboration with the State University of Milan. The guidelines are based on evidence and experiences collected from 102 countries representing all WHO regions.

Source: WHO



## Home monitoring improves blood pressure control

People with high blood pressure do better when they monitor their blood pressure at home, a UK study shows. Home monitoring is linked to a greater number of people achieving target blood pressure, compared with those monitored in the usual way in their doctor's office.

Professor Francesco Cappucco, from St George's Hospital Medical School, London, UK, and colleagues analyzed 18 randomised controlled trials involving a total of 1359 patients who monitored their pressure at home, and 1355 whose blood pressure was monitored in the healthcare system.

The TEAM found that systolic (upper reading) and diastolic (lower reading) pressure were both lower in people who had home blood pressure monitoring. After factoring in various adjustments, systolic and diastolic pressures were about 2 points lower.

The likelihood of having

blood pressure above pre-determined targets was also lower when people measured their blood pressure at home, the researchers add.

Cappucco said, "It is the procedure of taking care of your blood pressure throughout the trial that has led to the blood pressure being lowered when you get to the clinic."

In clinical terms, the differences in blood pressure are quite small, the authors point out in the journal. But considering the millions of people with high blood pressure, those differences "would add up to many, many more strokes and heart attacks as a saving," Cappucco pointed out.

Regardless, he said, because home blood pressure monitoring is now feasible, acceptable and generally reliable, it's a useful way to involve people more closely in the management of their blood pressure.

Source: *British Medical Journal*

## New findings ---

## Most asthma drugs safe to use during pregnancy

Most asthma drugs can be used during pregnancy without raising the risk of adverse birth outcomes, new research suggests.

The exception is steroid pills, such as prednisone, which may increase the risk of preterm delivery (delivery before 28 weeks of pregnancy). Still, in terms of the effect on pregnancy, achieving asthma control, even if it means using such pills, is probably preferable to having uncontrolled disease.

Doctors "generally try other agents first before using oral steroids, so I don't think our findings will change practice in that regard," lead author Dr. Michael Schatz, from Kaiser-Permanente Medical Center in San Diego, California, told.

"The bigger impact of the study will be to provide reassurance that the other

asthma medications" can be safely used during pregnancy, he said.

Treatment with inhaled beta-agonists, such as Proventil, inhaled steroids, like Pulmicort, or Theo-Dur was not associated with adverse birth outcomes. Use of steroid pills, by contrast, raised the risk of preterm birth by 54 percent and the risk of low birth weight by 80 percent.

Commenting on the apparent link between oral steroids and prematurity, Schatz said it's possible that it is not really a drug effect, but rather a reflection of disease severity. "As much as we try to control for disease severity, we still can't conclude that oral steroid use actually caused these outcomes."

Source: *Journal of Allergy and Clinical Immunology*, June 2004.