

scene, which patients to give attention to and how to recognise those who are dead. An additional major component of the training was two-fold:

Crash scene management and extrication

Until this training the main instrument used to get trapped victims out of cars was an axe – hardly surprising that 'secondary injuries due to extrication were common'. In crash scene management emphasis was placed on preventing additional crashes and making the scene safe. Using blunt tools to extricate victims, such as car jacks and crowbars was emphasised.

Training

Many of the drivers did not have schooling beyond primary and some none at all. The course itself was 6 hours of instruction and practical including a live simulated crash scene and extrication. The trainers also insisted that rubber gloves be used, or at least plastic bags as an alternative to prevent blood contamination. The drivers were asked to make up their own first aid kits and splints. After the course 70 participants responded to a second evaluation to discover whether the lessons learned had been used and were of value. The results showed that there was an improvement in casualty handling after the course.

The authors recognise that objective criteria such as reduction in deaths on arrival in hospital would be difficult to obtain. This is a most exciting development and we must commend those involved for undertaking such a difficult but worthwhile task. Particularly with the advent of the minibus taxi in most parts of Southern Africa, road accidents have been on the increase. Making the drivers aware of the need of first aid and recovery of victims is something that most countries could do without high-level medical intervention.

This study was carried out by nurses and the training given by first aid personnel from Ghana Red Cross nurses and doctors. I recommend this paper as fascinating reading and hope that it will inspire many of us to follow suit.

Professor Ken Rankin
Head of Department of Orthopaedics
Kalafong Hospital
University of Pretoria
South Africa

References

1. Oladiran I, Meier DE, Ojelade AA et al. Tetanus: continuing problem in the developing world. *World J Surg* 2002; 26: 1282–5.
2. Bokhari F, Brakenridge S, Nagy BSK et al. Prospective evaluation of the sensitivity of physical examination in chest trauma. *J Trauma, Injury Infection and Critical Care* 2002; 53: 1135–8.
3. Mock CN, Tiska M, Adu-Ampofo M et al. Improvements in prehospital trauma care in an African country with no formal emergency medical services. *J Trauma, Injury, Infection and Critical Care* 2002; 53: 90–97.

OBSTETRICS & GYNAECOLOGY

Maternal mortality in Africa

Maternal mortality using the World Health Organization definition entails maternal deaths occurring during pregnancy, labour, and within 42 days of delivery inclusive of abortion and ectopic pregnancy.¹ Maternal death remains a major catastrophe all over the world and complications of pregnancy and childbirth are the leading causes of death and disability among women of reproductive age in all countries. It is estimated that the total number of maternal deaths in 1995 was 515 000, of these 252 000 (48%) occurred in sub-Saharan Africa. For every woman who dies 30 more suffer injuries, infections, and disabilities in childbirth. This means that at least 15 million women suffer morbidity as a result of pregnancy and childbirth.

In terms of maternal mortality ratio, the world figure is estimated to be 400 maternal deaths per 100 000 live births with Sub-Saharan Africa having the highest ratio of (1:100).² In terms of the lifetime risk of maternal death, the disparity remains striking. One in 12 women in parts of sub-Saharan Africa compared with 1 in 4000 women in Northern Europe³. Countries with the highest maternal mortality ratios include Sierra Leone, Burundi, Ethiopia, Somalia, Chad, Côte d'Ivoire, Nigeria, Equatorial Guinea, Burkina Faso, Angola, and Kenya; these countries have rates of 1000 or more per 10 000 births.² Some of these countries are noted for long periods of civil war (Angola, Ethiopia and Somalia to mention a few), with associated destitution, famine, squalor and hunger. Under these conditions, maternal death can only get worse.

Despite good ideas and intentions, the maternal mortality in sub-Saharan Africa is rising rather than falling. This trend will not change as long as the fundamental issues of poverty with gross inequalities, unforeseen emergencies, and illiteracy prevail in the continent.

The main obstetric causes of death include haemorrhage, sepsis, eclampsia, anaemia, and prolonged obstructed labour; complications of unsafe abortions are largely preventable or can quite readily be treated. These coupled with a myriad of indirect contributors like communication and transportation problems, shortages of health institutions, and other logistic difficulties – together with ignorance, superstition, and adherence to cultural beliefs that are detrimental to good health – act synergistically to convert a bad situation into a desperate one.

In Nigeria, the unforeseen emergency constitutes a high-risk group for maternal mortality. Women have virtually no antenatal care and often arrive at hospital when life is already endangered by difficult labour, advanced pregnancy complications, or coincidental diseases. No fewer than 70% of all hospital deaths in Nigeria have been attributed to unforeseen emergencies.

Clinical Review

The late arrival is due to various constraints – cultural, financial, social, transportation, telecommunication barriers, and most importantly illiteracy.

The goal set out by the Safe Motherhood Initiative conference in Nairobi in 1987, and later adopted at several United Nations conferences, was to reduce maternal mortality by half by the year 2000. It has been suggested that to achieve this objective efforts must shift from the level of advocacy to the provision of an accessible quality maternal healthcare service. This should encompass the 'Four Pillars' of Safe Motherhood which include family planning information, counselling and services, provision of basic but professional antenatal care, clean/safe delivery under supervision of a trained person, and readily available essential/emergency obstetric services at referral hospitals.

Family Planning is now an integral part of maternal and child healthcare (MCHC) in many developing countries, including sub-Saharan African countries. It has the great potential to improve the general health of women and to prevent death due to unwanted pregnancies. Unfortunately, despite stringent efforts at promotion, contraceptive prevalence, though on the increase, remains very low in many sub-Saharan African countries. It is, for example, 1% in Burkina Faso and Chad Republic, 2% in Ethiopia, and 3% in Cameroon. This is due to high illiteracy rates, shunning contraception and embracing high fertility – either from ignorance and superstition, or as a means of correcting a correspondingly high perinatal and infant mortality rate. In Nigeria, where some awareness has been developed, the contraceptive acceptance rate is still as low as 8% and supplies often run out due to non-availability or an erratic supply. Thus, family planning alone is unlikely to bring about the dramatic reduction in maternal deaths in Africa that everyone expects.

The health sector in several sub-Saharan African countries has witnessed striking changes over the years. Many new institutions have been constructed, although commonly poorly equipped and functioning with varying degrees of efficiency. There has also been an increase in the availability of various trained health personnel. However, these improvements have seen only marginal changes in the maternal death rate, which suggests that the solution to the problems of high maternal mortality do not lie completely within the confines of health institutions. Formal education has been shown to be a prime mover in reducing maternal mortality. Once women are educated they tend to make better use of existing medical facilities; they have antenatal care, and come to hospital early when things go wrong. Education also serves as the surest way of improving the general socio-economic status of people, which is a crucial factor in reducing maternal deaths. This, in addition to strong political will creating the right priorities, accounted for the drastic maternal mortality reduction in poor non-African countries like China, Cuba, Costa Rica, Sri Lanka and the State of Kerala in India⁸. No wonder it was commented by a notable scholar, 'Illiteracy and Maternal Health: educate or die'³.

O Adegbola, B A Oye-Adeniran and C Igwilllo
Department of Obstetrics and Gynaecology
Lagos University Teaching Hospital
Nigeria

References

1. World Health Organization. Definition and Recommendations. Manual of the International Statistical Classification of Diseases, Injuries and Causes of Death, Vol. 1. WHO, Geneva, 1977.
2. WHO, UNICEF and UNFPA. Maternal Mortality in 1995. Estimates developed by WHO and UNICEF. WHO, Geneva, 2001.

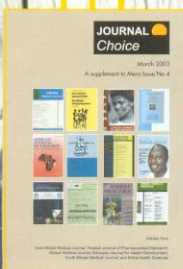
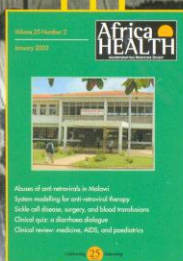
Please contact the Editor for further reading to this article

Africa Health Reader Enquiry Service

Each advertisement includes a reader enquiry number. For further information, complete a reader enquiry card, circle the appropriate number(s) and send it to us.

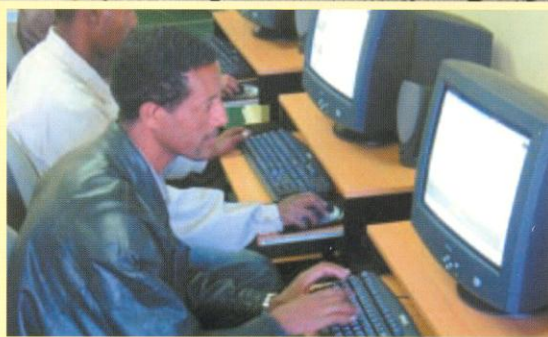
	Page	Code
Adam Rouilly	8	20
Dräger	Mera IFC	21
Enraf Nonius	Mera IBC	22
Healthcare Equipment		
Supplies	AH IBC	23
Johnson & Johnson	AH IFC	24
Luex – Ciprolex	9	25
Nuffield Institute	23	26
Philips Medical Systems	5	28
Roche Pharmaceutical	AH BC	29

	Page	Code
Roche Diagnostics	Mera BC	30
Schiller	8	31
Talc	25	31
UNISA	13	33
RHM journal (Safe motherhood)	30	10
Macmillan	30	11
Elsevier Science	30	12
RHM journal (Beyond acceptability)	30	13
BMJ Books	30	14
Gaskell	30	15



Mera

Medical Education Resource Africa



CME: special 14-page supplement

Primary care treatment of epilepsy

Antibiotic resistance in Africa

Plus: news, case reports, reviews

Summaries & abstracts, clinical quiz

March 2003

with financial support from DFID

Issue 4

Volume 25 Number 3

March 2003

Africa HEALTH

INCORPORATING MEDICINE DIGEST



Antibiotic resistance in Africa

The impact of civil strife on adolescent girls

Healthcare news, views and letters from across Africa

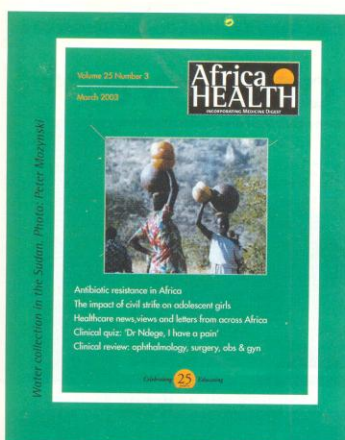
Clinical quiz: 'Dr Ndege, I have a pain'

Clinical review: ophthalmology, surgery, obs & gyn

Celebrating

25
years

Educating



Correspondence to:
The Editor, *Africa Health*
FSG Communications Ltd
Vine House, Fair Green, Reach
Cambridge, CB5 0JD, UK
Telephone: +44 1638 743633
Fax: +44 1638 743998
E-mail: info@fsg.co.uk

Publisher/Editor
Bryan Pearson
Assistant Editor/Subscriptions
Penny Lang
Summaries and Abstracts
Doug Addy
Production & Design
Elizabeth Hyde
Advertisement Manager
Stuart Marritt
Accounts Manager
Roger Clarke

For full subscription details
for readers in Africa, please see Page ii of
the preceding introductory pages to *Mera*,
the Medical Education Resource Africa
within which *Africa Health* and *Tropical*
Doctor journals appear in Africa.

For readers elsewhere the annual
subscription is as follows:
UK and EC: £56 (postage included); all
other countries £81 or US\$136 (airmail).
Single copies if available: £12
Please communicate to the Cambridge
office (as detailed above).

ISSN 0141 9536
Published six times a year by:
FSG Communications Ltd
Printed by the Friary Press, Dorchester, UK
All contents are © 2003
FSG Communications Ltd.



March 2003

Contents

Letters

- 3 Ignorance worse than poverty;
cataract surgical services; blood
transfusion: the window period;
testimonials for *Mera*

Newsdesk

- 4 Influenza virus sweeping across
Africa; cloth filters for cholera; new
meningitis vaccine; outbreak of
kala azar in southern Sudan; RBM
Partnership board established;
global fund update

Features

- 10 Antibiotic resistance in Africa –
discerning the enemy and plotting
a defence
Iruka N Okeke and Anibal Sosa
- 15 The impact of civil strife on
adolescent girls' reproductive
health
Kennedy Amone-P'Olak

Clinical Review

- 20 Ophthalmology: visual impairment
in African children

Surgery: tetanus in Nigeria;
roadside first aid in Ghana; crash
scene management and extrication
to X-ray or not to X-ray;

Obstetrics & gynaecology:
maternal mortality in Africa

Medicine Digest

- 26 Abstracts from the literature;
paediatrics, tropical, AIDS, general,
surgery

Clinical Quiz

- 32 Dr Ndege, 'I have a pain'
Answers on page 25

Vol 25 No 3 March 2003

Complacency and poor compliance lead to antibiotic resistance

Antibiotic resistance is reaching crisis proportions in many communities, and health professionals need to take a much more active role than hitherto if the inexorable rise in resistance is to be checked.

In Africa, the crazy pharmaceutical distribution system is central to the problem. Government drug registration systems are expensive and laborious, and not surprisingly the criminal fraternity has moved in to profit from it and flood markets with imitations or fakes from poorly regulated markets. Pharmaceutical production in India and China has mushroomed in recent years... in India I'm told that there are now over 3000 manufacturers!

Physicians, worried about the efficacy of the drugs their patients will buy, then compound the problem by prescribing stronger formulations than a condition really requires, in the forlorn hope that the patient will receive some active ingredients in what they buy. And too often the patient doesn't complete the course anyway...

It's a vicious circle. The article in this issue (page ten) on antibiotic resistance makes salutary but important reading. The authors, members of the Alliance for the Prudent use of Antibiotics are well qualified to comment, and yet when I checked their website (www.healthsci.tufts.edu/apua) I was amazed to see that Africa has only one APUA chapter (in Senegal). Surely there should be more action?

It would be interested to elicit some debate on this. What are the pressure points? Is it the counterfeit market? Is it pharmaceutical pricing structures? Is it poor prescribing practice? Is it street corner vending? Is it poor patient compliance? Is it statutory regulation? What is failing?

What are the core problems, and what solutions are being found to counteract them? Amidst the general gloom, there must be some positive lessons out there that can be usefully shared between readers.

Bryan Pearson

PS The US Centers for Disease Control in Atlanta estimates that one-third of all outpatient antibiotic prescriptions are unnecessary.

Africa Health 1