HEALTH & DISEASE

- OTHER -

1998 - 1999

# New travel souvenirs: a nasty bug or two

19/2/98 (89) ART

**Along with the good that has accompanied South Africa's opening up to the rest of the world, comes the bad – an increase in diseases not common in the country.**

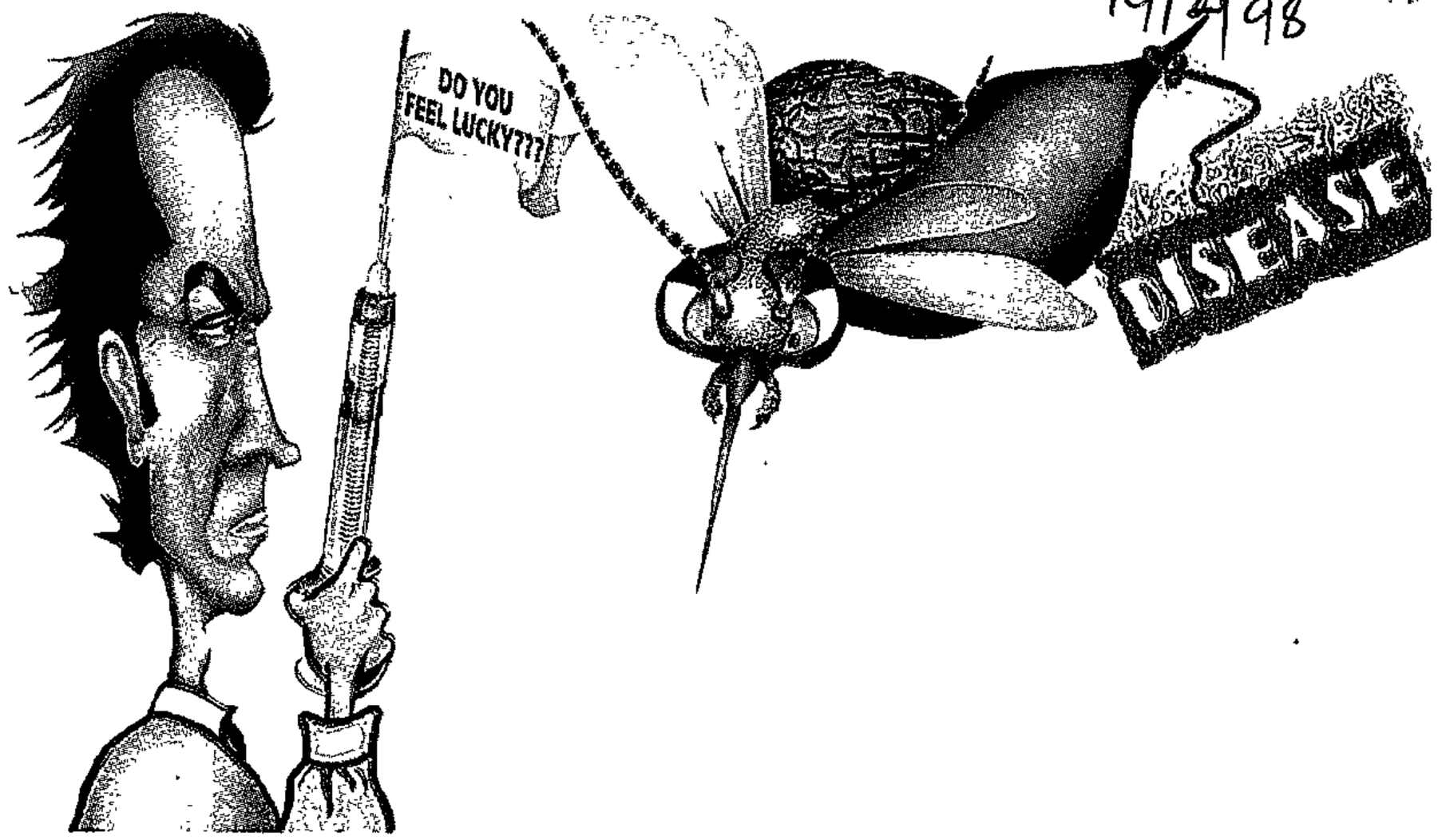
Medical experts say the increase in cross-border travel by air and by road, coupled with unusual weather patterns as a consequence of the El Niño phenomenon, are playing a part in contributing to the spread of dangerous known diseases, as well as some of unknown origin.

Serious flooding and rainy conditions in East Africa, for example, are spreading water-borne diseases such as cholera.

Doctors Steven Toovey and Andrew Jamieson of Medinfo, a medical news and health-care service, say this is happening in other parts of the world, too. For instance, in Peru last month there were 3 000 reported cases of cholera. Previously, there were this many cases in a year.

Depending on where you are going and what time of the year it is, Dr Toovey advises that you take immunisation seriously.

Soccer fans visiting Burkina Faso for the African Nations Cup Tournament have been warned that outbreaks of meningitis in west Africa and other health hazards must be taken into consideration when planning their journey.




They should seriously consider immunisation against meningitis, while immunisation against yellow fever is obligatory, says Dr Jamieson, medical director of British Airways Travel Clinics in Africa.

He says malaria is also a risk. Travellers to west Africa should use insect repellent, cover up with long sleeves and long trousers, and definitely take malaria tablets, with either mefliam or a combination of daramal and paludrine.

Travellers also should exercise strict food and water hygiene. Contaminated food and water are common sources of disease in travellers, many of whom do not possess any immunity to the local disease-causing micro-organisms.

Medinfo reports outbreaks of bacterial meningitis in Ghana. This has been confirmed by Albert Asamoah-Baah, the acting director of medical services.

Epidemics of meningococcal meningitis occur during the hot dry season in west Africa. A serious epidemic of meningococcal meningitis occurred in 1997 throughout large parts of Ghana, killing many people. The same pattern of disease is emerging this year, but across a wider area.

Dr Jamieson comments: "Meningococcal meningitis is a highly contagious and extremely serious disease, which is caught by having physical contact with infected people." But he says some people carry the disease without showing any of its symptoms.

"Symptoms include fever, headache, neck stiffness and an aversion to bright lights. A rash and haemorrhage may also occur. Treatment may be effective if started in the very early stages of the disease, although the disease sadly all too often proves rapidly fatal, sometimes in 24 hours.

"A vaccine is available which is effective against some strains of the disease."

Meanwhile, because of poor infrastructure, such as a lack of a proper water system and a lack of health facilities, Mozambique is having a severe cholera outbreak.

Official figures show 109 people dying each week, but unofficially it could be as high as 300, says Dr Toovey.

The World Health Organisation (WHO) and the Mozambican Ministry of Health have issued a warning to all countries neighbouring on Mozambique to increase their vigilance against cholera. They are concerned that Beira's importance as a port for the southern African subcontinent will facilitate the spread of cholera.

It is a bacterial disease that causes a continuous watery diarrhoea and then death by dehydration. To date, there have been 11 000 cases in Mozambique.

Recent heavy rains have caused the cholera outbreak in Beira to get worse and the rains have been held responsible for the deteriorating human and animal health situation in east Africa, with increased breeding of disease-spreading mosquitoes and biting midges.

Dr Toovey gives the following advice to all travellers to Mozambique: "Exercise strict food and water hygiene and drink only bottled water and beverages. Ensure that all food is thoroughly cooked, and avoid peeled raw fruit and vegetables.

"Travellers should also protect themselves against malaria," he says.

The injected vaccine against cholera is not recommended by the WHO and strains of the disease circulating in east Africa appear resistant to most commonly used antibiotics.

Meanwhile, in Hong Kong, two women were admitted to hospital this month with suspected cholera. Three cases of cholera have already been confirmed in Hong Kong.

Chinese health officials have issued confirmation that all three contracted cholera after eating shellfish. These were the first cases of cholera reported in Hong Kong this month.

Dr Jamieson advises: "It is still safe for travellers to visit the territory, but they should certainly exercise strict food and water hygiene."

# Invasion of the KILLER TICKS

## Congo fever fear grips a small town after man dies

(89)
ST (cm) 15/3/98

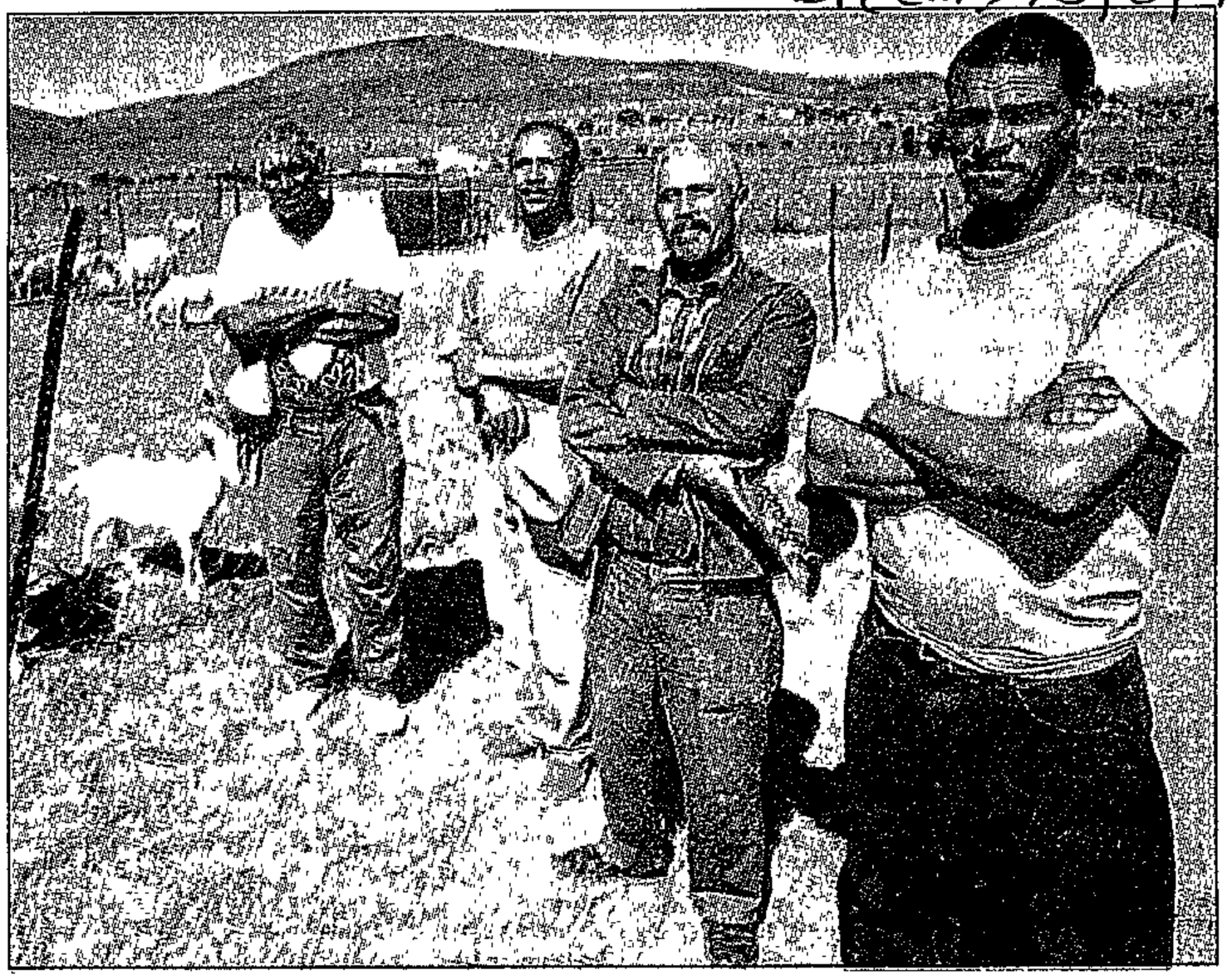
BOBBY JORDAN

HUNDREDS of farm-workers in a tick-infested Northern Cape town are living in fear following news that traces of deadly Congo fever — transmitted to humans via ticks — have been found in the body of a local teacher who died last week.

Farm-workers in Steinkopf, about 70 km from the South African border with Namibia, claim they have been besieged by killer ticks and say it is just a matter of time before more residents become infected.

Some fear they may already be infected and are appealing for help to get rid of the ticks.

"This Congo fever is a frightening thing. Somebody must do something," said 84-year-old sheep farmer Bokkie Fysch.



**LIVING IN FEAR: Farm-workers in the town of Steinkopf fear they've been besieged by killer ticks carrying Congo fever Picture: AMBROSE PETERS**

"I've never seen so many ticks in the bush before. Everything is covered in them. It's not right," said Fysch, adding that he gave up eating meat two years ago because he feared ticks were poisoning his animals.

Health authorities have appealed for calm, pointing out that schoolteacher Vivian Cloete's death was indirectly linked to Congo fever.

Doctors say Congo fever antibodies found in Cloete's body proved only that he'd been infected by the virus at some stage — probably via a tick-bite.

The actual cause of his death was attributed to a serious liver condition.

However, doctors are monitoring at least a dozen people known to have had contact with Cloete before his death, including hospital staff at a clinic in Nababeep, where Cloete was first admitted, and at Cape Town's Libertas Hospital where he died last Wednesday.

Cloete's mother, Annie, said after she had found out that her son had been infected with Congo fever she did not leave her house for days, for fear of infecting her neighbours.

Health authorities tested her and her family but found no signs of infection.

She said her son, a diabetic, had been ill for years and it appeared his death was probably not related to Congo fever.

A Steinkopf doctor confirmed that Cloete had nearly died last year when he slipped into a diabetic coma.

He said it was virtually impossible to tell when and where Cloete had picked up the Congo fever virus.

But Steinkopf farm-workers were adamant that Cloete was infected by ticks in the semi-desert scrub outside town.

Local people believe the ticks "hitched a ride" on livestock coming across the border from Namibia.

Chris Young, who worked with Cloete on a farm, said farm-workers were often bitten by ticks, and many suffered from tick-bite fever.

But most people had not heard of Congo fever until last week.

"Now a lot of us are wondering that maybe people have died from this thing in the past," Young said.

Ticks were unavoidable in the bush, Young added. Most people attributed tick-related illnesses to the red "bontpoot" tick, which was difficult to dislodge once it had burrowed into one's skin.

"In the past we didn't worry — we just got used to having ticks on us. Now that we hear all this about Congo fever it's another matter. We're looking for ticks all the time," Young said.

Dr Vic Vaughan, a senior doctor at Nababeep hospital, said he'd never heard of a single case of Congo fever in the area.

However, he added, it was possible that many people could be carrying the virus without knowing it.

"What worries me is not so much the Congo fever but the fact that there must be ticks out there carrying it," Vaughan said.

According to medical literature, the virus was first recognised in the Crimea region of the Soviet Union at the close of World War Two and had subsequently appeared in eastern Europe, the Middle East, parts of central and east Africa and South Africa.

The virus killed a woman who worked at the Oudtshoorn abattoir in November 1996, setting off a major Congo fever scare.

While ticks are considered the major transmitters of the disease to humans, some cattle and sheep store the disease in their blood.

# Mpumalanga on standby for possible cholera outbreak

(69)

Star 19/3/98

By Anso Thom
Health Reporter

A field hospital has been put on standby to contain a possible epidemic in a remote Mpumalanga village after a woman contracted cholera from the Lomati River.

The mother of five is making a speedy recovery in hospital after becoming the first person to contract cholera within South Africa's borders during the current southern African outbreak.

The woman, who comes from Phiva village, was admitted to Shongwe Hospital on Friday with profuse watery diarrhoea.

Dr David Durrheim, a consultant in communicable disease control with the Mpumalanga health department, said yesterday that the woman had not travelled outside the village and they suspected she had contracted cholera from contaminated water from the Lomati River.

"She has recovered well and is ready for discharge," said Durrheim, adding that two of her children also had diarrhoea, but tests revealed no evidence of cholera infection.

He said her children, as well as other villagers, were being carefully monitored.

A local clinic had remained open over the weekend with stool specimens continuously being sent through for testing.

A field hospital was on standby, but Durrheim described the present situation as stable. Water Affairs was also ensuring clean water from a nearby water project.

Durrheim said cholera occurred in areas of poor hygiene where domestic water was contaminated with human faeces. Food which was contaminated by infected food handlers, and tainted shellfish, played a secondary role.

> **"The most important thing is to rehydrate the person"**

He said he most profound symptom was diarrhoea which, in turn, led to a huge loss of fluid and the person's rapid dehydration.

"The most important thing is to rehydrate the person as soon as possible," Durrheim said, warning that cholera was spread easily in areas where there was poor sanitation.

The woman is the sixth person in the region to be stricken with the life-threatening disease since January.

The other five victims in the province contracted the disease in Mozambique, where about 15 000 people have been infected and more than 300 people have died since an outbreak began in August.

Farmers in the area are being urged to provide adequate ablution facilities for casual labour during the current harvesting season.

# SA spearheads African drive to conquer malaria

ARG 6/4/98 (89)

**CAROL CAMPBELL**
SPECIAL WRITER

**Deep concern over the rampant spread of malaria across Africa and the lack of international interest in getting it under control has prompted a team of African scientists to collaborate to map the spread of the disease across the continent for the first time.**

Researchers from the South African Medical Research Council are leading the project, called Mapping Malaria Risk in Africa, which will produce a unique database on a plague that has killed millions of Africans.

Researchers from Mali, Cameroon, Tanzania, Kenya, Ghana and the Ivory Coast are partners in the project.

Until now there has been no comprehensive information on the spread of malaria in Africa. Instead, individual countries have been running their own research and control programmes – often inadequately.

Dave le Sueur, a research council scientist and co-ordinator of the project, said malaria killed more people in Africa than AIDS, and that 90% of all people who die from malaria are Africans.

"Coupled with civil war, it is devastating the continent's economies – yet the world and many African governments are doing almost nothing to control it," he said.

Often this was due to the absence of adequate information to plan and focus limited resources.

"Malaria places a massive strain on a country's health service and can devastate productivity, yet little progress has been made against the disease," said Dr Le Sueur.

By operating across international borders, the research team will provide information which will show how important it is for neighbouring countries to work together to stamp out malaria.

The scientists and a small handful of international partners were in Cape Town recently to discuss the progress of their research.

**Waiting for rain – and a flood of patients, page 5**

# Scientists from Africa join forces to push back malaria

Star 7/4/98 (89)

## It has claimed more lives in Africa than Aids and 90% of all those who succumb to the dreaded disease are Africans, researcher reveals

**By Carol Campbell**
Cape Town

Deep concern over the rampant spread of malaria across Africa and international disinterest in getting it under control has prompted a team of African scientists to collaborate and map the spread of the disease across the continent for the first time.

Researchers from the South African Medical Research Council (SAMRC) are leading the project called Mapping Malaria Risk in Africa (Mara), which will provide a unique database on the plague which has killed millions of Africans.

Researchers from Mali, Cameroon, Tanzania, Kenya, Ghana and the Ivory Coast are partners in the project.

Until now there has been no comprehensive information available on the spread of malaria in Africa. Instead, individual countries have been running their own research and control programmes – often inadequately.

Dr Dave le Sueur, a SAMRC scientist and co-ordinator of the project, said malaria killed more people in Africa than Aids, and that 90% of all people who died from malaria were Africans.

"Coupled with civil war, it is devastating the continent's economies – yet the world and many African governments are doing almost nothing to control it. Malaria places a massive strain on a country's health service and can devastate productivity, yet little progress has been made against the disease," he said.

By working across international borders, the scientists will provide information which will show how important it is for neighbouring countries to work together to stamp out malaria. The scientists and a small handful of international partners were in Cape Town recently to discuss the progress of their research, which is now being used by world health authorities as a model on how to chart the severity of other diseases.

Dr le Sueur said the team had battled to win full international financial support for the project, which was eventually funded by a Canadian organisation called the International Development Research Centre (IDRC).

"They believed in the project from the start and put in R1-million seed funding.

"Now we are starting to make people sit up and take notice, but, before, I don't think the international community was really interested in sorting this problem out. It was seen as just one of those things – in Africa there is malaria."

The World Health Organisation (WHO) has given the researchers R2,2-million which will enable them to continue building their unique model.

Dr le Sueur said the team had collected the data, already gathered by doctors and scientists over decades, and used it with information about weather patterns and climate, to build the malaria model of Africa.

"The information was all there, in dusty boxes buried in the basements of buildings. We just had to ferret it out and feed it into the computer."

In remote areas where no statistics have ever been collected, the scientists have used weather patterns and climatic information to predict how bad the malaria levels in these communities are.

Climate is important in the mapping of malaria because the mosquito which carries the parasite can only survive in warm, humid conditions.

By using weather forecasts, the Mara team can predict the onset of malaria in a region and warn health authorities to

# HOLIDAYMAKERS WARNED AGAINST SPREAD OF KILLER MOSQUITOES

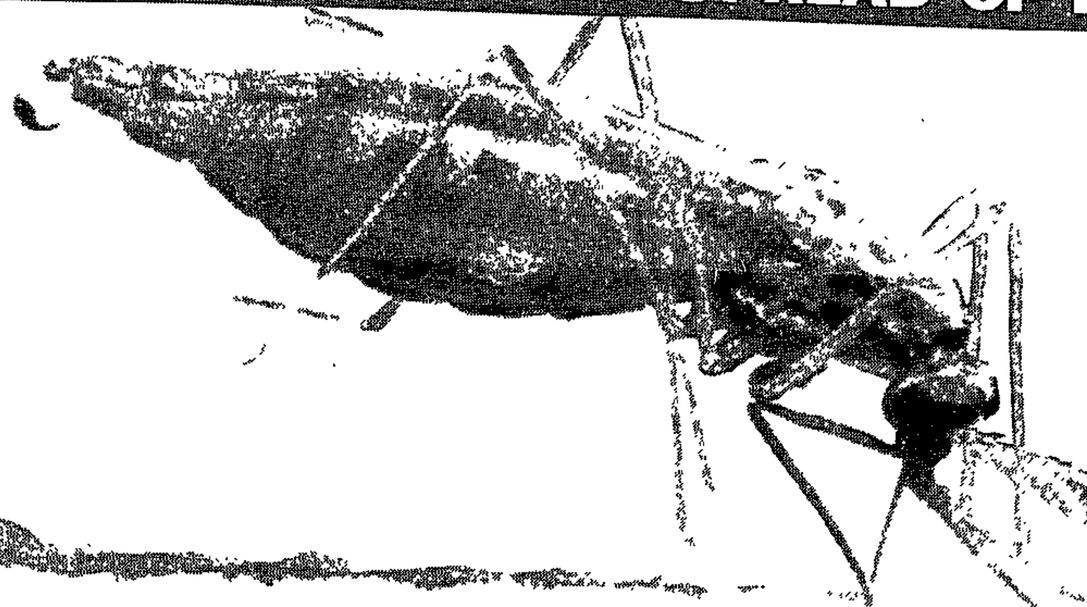
## DRUG REGIMES FOR CHLOROQUINE - RESISTANT AREAS

***mefloquine*** (Lariam®)
**ADVANTAGES**
- highly effective
-weekly regime
**DISADVANTAGES**
- certain contra-indications
- not yet indicated for long-term use
- severe neurological S/E, although rare
- relatively expensive

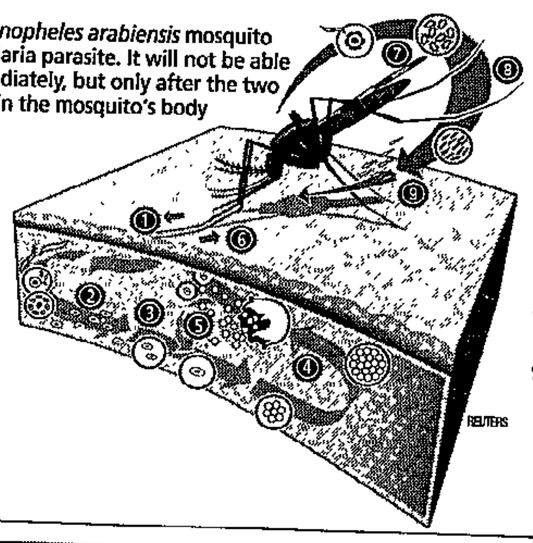
***chloroquine*** (eg Nivaquine®, Daramal®, Plasmoquine®) **and** ***proguanil*** (Paludrine®)
**ADVANTAGES**
- well tolerated with a low incidence of severe S/E
- can be used long term
- available without a Rx
- relatively inexpensive
**DISADVANTAGES**
- widespread resistance, especially in SE Asia
- poor compliance due to complicated regime

***doxycycline*** (e.g. Vibramycin®)
**ADVANTAGES**
- resistance is rare
- highly effective in SE Asia
**DISADVANTAGES**
- relatively little experience as an antimalarial
- short-term use only (<7 weeks)
- photosensitivity and candida superinfection
- relatively expensive

*Source: Lee Baker, Glaxo Welcome Malaria Hotline, TPS Drug Information Centre*



Malaria is only transmitted by the female *Anopheles arabiensis* mosquito which has fed off a human carrying the malaria parasite. It will not be able to pass malaria on to the next human immediately, but only after the two weeks that it takes the parasite to develop in the mosquito's body




**Three-week period**

1: Malaria parasite injected into human body

2: Infects red blood cells and gives rise to young parasites that invade the red blood cells

3: Parasite grows and reproduces

4: Infected cell ruptures, releasing young forms which invade new red cells

5: Asexual cycle of development is repeated over and over, destroying red blood cells

**Two-week period**

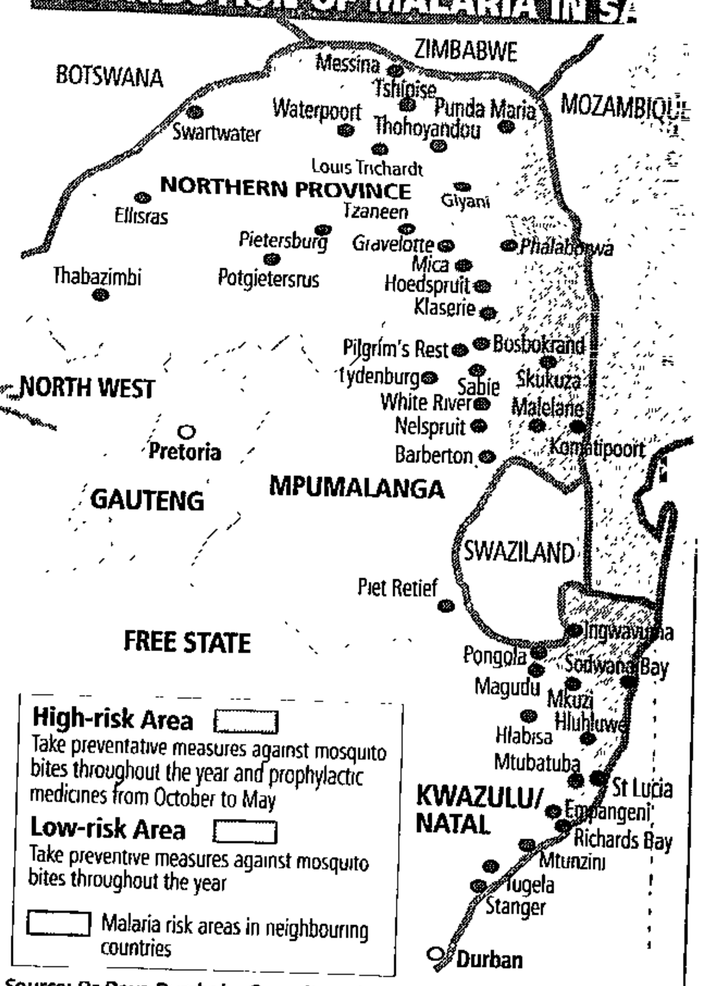
6: Mosquito sucks in infected human blood

7: Parasites mate in stomach and develop into a cyst

8: Sporozoites develop inside the cyst

9: They invade salivary glands, until injected into new human host

## DISTRIBUTION OF MALARIA IN S.A.




**High-risk Area** Take preventative measures against mosquito bites throughout the year and prophylactic medicines from October to May

**Low-risk Area** Take preventive measures against mosquito bites throughout the year

Malaria risk areas in neighbouring countries

*Source: Dr Dave Durrheim, Consultant, Communicable Disease Control. Mpumalanga Dept of Health*

set up controls.

One of the data collectors is Kenyan Judy Omumbo, who said she found information from pre-colonial days collected by people she had only read about in books.

"It was all there on bits of paper in the basement of the health department building in Nairobi."

Dr Don Savigny, an IDRC scientist working in Tanzania, said malaria was a "continuing emergency" for the continent.

"A random control trial was done in 1996 (in collaboration with the WHO) in four African countries which showed us just how critical the problem was.

"Households were given mosquito nets treated with insecticide and it reduced the number of total deaths by 20% to 30%."

The easiest way to control the spread of the disease was to prevent people being bitten, he said.

"The mosquitoes which carry malaria bite at night, usually in the middle of the night, when most people are sleeping. This means a treated mosquito net is one way of preventing the spread of the parasite," Dr Savigny said.

problem for South Africa because of the movement of people across the border.

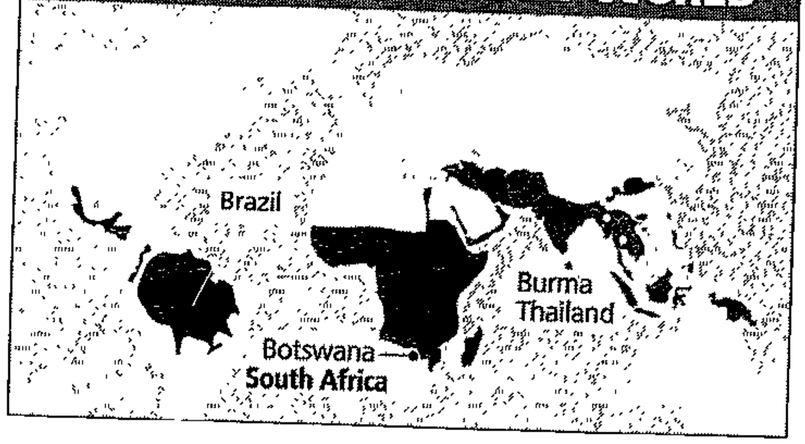
"The only way to wipe malaria in South Africa off the map is through regional collaboration," Dr le Sueur said.

The country's worst hit areas are the Northern Province, Mpumalanga and KwaZulu Natal, but regular spraying of buildings meant the infection rate could be kept under control. Even though the mosquitoes which carry the malaria parasite cannot survive Cape Town's cold winters, he warned that city dwellers who travelled into malaria areas faced the biggest risk of contracting the disease.

"Since the government changed, Africa has opened to South Africans, with more and more being exposed to malaria-carrying mosquitoes.

"They probably face the biggest risk of catching malaria because they are not immune or they are blasé about taking proper medication," Dr le Sueur said.

## HOTSPOTS ACROSS THE WORLD




## *Deadly strain rampant in the Amazon*

Brasilia After the fires which threatened their huge rainforest reservation in the northern Amazon, Brazil's Yanomami Indians are now at risk from rampant malaria, a Catholic missionary has warned.

"The number of cases is exploding," said Carlo Zacquini, a member of the independent Commission for the Creation of the Yanomami Reservation (CCPY).

He said 1 100 members of the distant Aoaris community, who live in communal huts in clearings near the Venezuelan border, were particularly at risk.

About 800 Yanomamis there were sick with the falciparum strain of malaria which, if goes untreated, quickly leads to coma and death.

CCPY health workers were able to fly into the jungle in recent days after forest fires grounded its planes for weeks.

The fires, the biggest on record in the Amazon, raged out of control for nearly two months.

Rain this week finally extinguished flames.

Troops and firemen, however, were still fighting fires in the north of Roraima state, near the border. Reuters

# Big guns of G8 to help fight malaria

(89)

Star 18/5/98

## Britain boosts mosquito eradication programme with R480-m donation

**By Tyrone Seale and Melanie-Ann Feris**

An international initiative to eradicate one of Africa's worst killer diseases, malaria, has been given a half-a-billion-rand boost at the Group of Eight summit.

Health and travel officials in South Africa welcomed the move, which will boost the country's R67-million battle against the scourge.

Britain has pledged R480-million to help wipe out the mosquito-borne disease which kills more than 2 million people each year and has devastated parts of Africa's tourist industry.

Prime Minister Tony Blair, who hosted the G8 summit in Birmingham at the weekend, said the funds would be contributed by his government's Department for International Development to the World Health Organisation's Roll Back Malaria initiative.

At the summit, the leaders of the G8 countries – Canada, the United States, Germany, the United Kingdom, Italy, France, Japan and Russia – agreed to support the initiative, as part of a larger plan to contain and eradicate infectious and parasitic diseases.

While the WHO estimates that 2 million of the 300 million to 500 million people who contract malaria worldwide die each year, poor record-keeping in Africa means there are no accurate figures on infection rates. It is estimated that a further half a billion people, 90% of them in Africa, suffer from the disease.

In South Africa, 5 500 people are thought to have malaria in KwaZulu Natal, where at least 45 people have died this year. Eleven people have also died of the disease in Mpumalanga, which has almost 4 000 confirmed cases.

The initiative aims to halve the number of deaths caused by malaria by 2010, and to halve that number again five years later.

Dr Andrew Jamieson, from the British Airways Travel Clinic in Johannesburg, said last night that any attempt to eradicate malaria would be welcomed in the country.

"Firstly, malaria causes major economic problems. A lot of people choose not to go to resorts like the Kruger National Park because of the risk of picking up malaria.

"Secondly, if we can stop deaths due to malaria, it will make a major difference to many people's lives."

Vincent Hlongwane, spokesman for the minister of health, welcomed the announcement as a "refreshing piece of news", especially since provinces like Mpumalanga and KwaZulu Natal were battling the disease.

South Africa will have to collaborate with neighbouring countries, which are battling with a higher incidence of malaria cases.

"Disease knows no boundaries and efforts to eradicate malaria can only be succeed if we work together," he said.

The Government spends more than R67-million each year to combat malaria.

The WHO initiative will promote, among other strategies, improved treatment of the disease through proper diagnosis and treatment; better protection, such as the use of insecticide-treated mosquito nets; the control of mosquitoes with the help of environmental development and industrial groups; and improved surveillance.

"Every 30 seconds, a child somewhere dies of malaria," said Clare Short, who heads Britain's Department for International Development.

"It kills indiscriminately, it puts an enormous strain on health services, and prevents the developing world from escaping from grinding poverty. The Roll Back Malaria initiative presents a huge opportunity to make a difference."

The initiative will co-ordinate a coalition which will include leaders from malaria-ridden countries, the WHO, United Nations agencies, the World Bank, scientific institutions, private sector bodies, and

► Report, picture Page 4

# UK puts up R480m for malaria battle

**OWN CORRESPONDENT**

**JOHANNESBURG:** Britain has committed R480 million to efforts to wipe out malaria, which claims more than a million lives each year.

Prime Minister Tony Blair, who hosted the G8 summit of world leaders in Birmingham at the weekend, said the funds would be contributed by his government's Department for International Development to the World Health Organisation's new "Roll Back Malaria Initiative", known as the RBM.

The leaders of Canada, the US, Germany, Britain, Italy, France and Russia agreed at the summit to support the initiative as part of wider efforts to contain and eradicate infectious diseases.

The World Health Organisation estimates that, of the 300 to 500 million people who contract malaria worldwide each year, about two million die. It is estimated that a further half a billion people, 90% of them in Africa, have the disease.

In South Africa, it is estimated that 5 500 people have malaria in KwaZulu-Natal, where at least 45 people have died this year alone. Eleven people have died of the disease in Mpumalanga, which has almost 4 000 confirmed cases.

The RBM intends to halve the number of malaria deaths by the year 2010.

Health ministry spokesperson Mr Vincent Hlongwane, welcomed the announcement, but said any efforts to tackle the disease in the country would have to be initiated in collaboration with South Africa's neighbours, who had a higher incidence of malaria.

"Disease knows no boundaries and efforts to eradicate malaria can succeed only if we work together," he said.

The government spends more than R67m a year in combating malaria.

(89) CT 18/5/98

# Scientists study SA's 'silent killer'

(89) RDM 28/5/98

**Josey Ballenger**

THE Medical Research Council and the Cancer Association of SA have pooled more than R3m to research a "silent killer" — oesophageal cancer.

At yesterday's project launch in Umtata, the council said black SA men had one of the world's highest rates of this cancer. One in 33, or 430 000 of today's population, risked getting the disease. Transkei had SA's highest rate.

Council president Dr Walter Prozesky said the council had been involved in researching oesophageal cancer in Transkei since 1965, and had found a toxin-producing fungus in homegrown maize "which could be linked to oesophageal cancer".

Four principal investigators and 14 leaders would set up projects to obtain information on cancer incidence, magnitude and survival; start a registry in Umtata; explore early detection methods; look at how diet might influence the disease's onset or prevention; and analyse genetic involvement.

The multidisciplinary research team involved the universities of Cape Town, Stellenbosch and Transkei and the council's mycotoxins and experimental carcinogens project. The project would be co-ordinated mostly by the University of Transkei. Cape Town's biochemistry professor Iqbal Parker would be project director.

# Major drive to reduce oesophageal cancer – a big killer in Transkei

(89) Star 11/6/98

By Anso Thom
Health Reporter

A major research drive by the Medical Research Council (MRC) and the Cancer Association of SA (Cansa) has been launched in Umtata to tackle oesophageal cancer among black South African men.

MRC spokesman Greer van Zyl said oesophageal cancer, which affected the gullet, had one of the highest incidence rates in the world among black South African men, with a lifetime risk of one in 33 developing this silent killer.

"This meant that 430 000 black men out of the current population were at risk of dying of the disease. Most sufferers don't realise they have it until it is too late, contributing to the high mortality rate," she said.

Van Zyl added that much of the research would be co-ordinated from the University of Transkei, as the highest incidence appeared to be in this area.

The MRC said in a statement that four principal investigators and 14 project leaders, many of whom were world leaders in their fields, would form the core of the Cansa/MRC Oesophageal Cancer Research Group.

**430 000 black men risk dying from the disease**

Projects would include obtaining information on cancer incidence, its magnitude and survival rates of sufferers, setting up a population-based cancer registry in Umtata, exploring and validating methods for the early detection of cancer, analysing genetic susceptibility to the disease and trying to identify new genes involved in the development of the cancer.

"The MRC has been involved in researching oesophageal cancer in Transkei since 1965, and has produced many key publications and discoveries, such as the presence of toxin-producing fungus in home-grown maize, which could be linked to oesophageal cancer," said MRC president Dr Walter Prozesky.

It was hoped that within three years this effort would reveal the causes involved in this killer disease.

Cansa had also formed a second consortium to work on oesophageal cancer in KwaZulu Natal, where the incidence was also high, Prozesky said.

The collaborative venture, which received R3-million from the MRC and Cansa, would involve the universities of Cape Town, Stellenbosch and Transkei.

# Campaign on to combat polio

Sowetan 13/8/98 (89)

**By Jimmy Tloti**

THE Greater Germiston health department has arranged a "mop up" anti-polio campaign in informal and squatter settlements in the city.

The venture will place emphasis on the immunisation of children below the age of five. The settlements are regarded as high risk areas for the spread of polio.

The drive will also help to "catch up" with children who missed being immunised in earlier campaigns.

Polio causes paralysis and permanent deformity. However, it is prevented by immunisation.

Parents are asked to bring their children for the first dose of immunisation at health centres in the settlements from August 17 to 21.

The second phase of immunisation will follow from September 14 to 18. All patients will be issued with health cards, the health department said.

Also on health, **Mokgadi Pela** writes that a workshop with key South African players and members of the HIV research fraternity is to take place in Durban on September 1 and 2.

The event will focus on ethical issues in the conducting of HIV trials in the country.

Among issues to be discussed are informed consent and the role of researchers in caring for vaccine trial participants with HIV infection.

Organisers believe there should be wide consultation about the ethical issues, given the interplay between politics and science and the nature of the Aids pandemic in South Africa.

This will ensure that future decisions made about vaccine trials are informed and based on ethically and scientifically sound information.

The workshop is being organised before the International Aids Conference in Durban in 2000.

For more details contact Ms Quarraisha Abdool Karim on (031) 251-481 during working hours.

# Govt in bid to wipe out cervical cancer

Guidelines being set up for all women in the country to get free screenings, regularly if possible

(89) Star 17/8/98

By Anso Thom
Health Reporter

Government is in the process of setting up guidelines which would see all women being screened for cervical cancer – the biggest cancer killer in this country – every three years.

The service would be offered free of charge at most primary healthcare clinics.

Christelle Kotzenberg, director for chronic diseases at the Department of Health, said the guidelines had not yet been approved.

She would not disclose any details on what the policy guidelines would contain.

Kotzenberg said the Government regarded cervical cancer as a priority issue. "Cervical cancer is the most common cancer in most females in South Africa. During 1992, 4 467 new cases of cancer of the cervix were reported," she said.

The lifetime risk was one in 30, with important population differences, Kotzenberg pointed out.

Asked where women could go for screening (pap smears), Kotzenberg said the policy was looking at implementing a cervical cancer screening programme in clinics and community health centres.

A pap smear can detect cells in the cervix which can be treated or removed before they become cancerous.

According to a policy document published after the Women's Health Conference in 1994, the majority of women did not have access to pap smears because there was no national policy on cervical screening.

This policy document is reportedly similar to the Government's policy guidelines.

Most pap smears were done at family planning clinics with most women often too young to need screening.

A national policy would ensure that all women, regardless of whether they could afford it, would have access to cervical screening.

Currently some women have many pap smears while the majority do not have any.

The goal of a cervical screening programme is to ensure that as many women as possible have access to three pap smears in their lives at 10-year intervals, starting at age 30 and finishing at 50.

If a woman wanted to be screened more regularly, then she would have to pay for the service herself. Should a woman show signs of cervical cancer, she would then be treated.

The policy document pointed out that there was more to setting up a cervical screening programme than simply doing pap smears.

The various components should include:

- An education programme for users and service providers;
- Provision of cervical smears at ages 30, 40 and 50,
- Follow-up of patients;
- An ability to collect, read and report on smears; and
- An ability to follow up on treatment.

It was also stated that cervical smears should be available at all health centres, but that primary healthcare and sexually transmitted disease clinics in particular should be prioritised for screening.

A national women's health card was also recommended to record the number of pap smears a woman had and whether follow-up treatment was required. The card would also serve as a reminder.

"It is better for all women to have one smear, than for a few women to have many," the document stated.

The World Health Organisation recommended one pap smear in a lifetime as a minimal programme.

## Pap smear is a simple, quick and painless test

- A pap smear is the way to examine cells collected from the cervix (lower part of the womb) and vagina. This test can show the presence of infection, inflammation, abnormal cells or cancer.
- Infection with the human papiloma virus is the probable cause of cervical cancer. The virus is sexually transmitted, like the virus that causes Aids. Cervical cancer has a pre-cancerous phase that lasts up to 20 years.
- In a pelvic exam, the uterus, vagina, ovaries, fallopian tubes, bladder and rectum are felt to find any abnormality in their shape or size. During a pelvic exam, an instrument called a speculum is used to widen the vagina so that the upper portion of the vagina and the cervix can be seen.
- A pelvic exam and pap smear are important parts of a woman's routine healthcare because they can detect abnormalities that may lead to invasive cancer. These abnormalities can be treated before cancer develops.
- A pap test is simple, quick and painless and can be done in a doctor's office, a clinic or a hospital. A sample of cells is taken from in and around the cervix with a wooden scraper or a small cervical brush or broom. The specimen or smear is placed on a glass slide or rinsed in liquid fixative and sent to a laboratory for examination.
- Women who are or have been sexually active, or have reached 18, should have pap tests and physical exams regularly. There is no known age at which pap tests cease to be effective. Women who have had a hysterectomy (surgery to remove the uterus, including the cervix), should talk to their doctor about whether to continue having regular pap smears.
- A woman should have this test done when she is not menstruating; the best time is between 10 and 20 days after the first day of the menstrual period. For about two days before the test she should avoid douching, or using vaginal medicines or spermicidal foams, creams or jellies. These may wash away or hide abnormal cells.
- If the pap test shows an ambiguous or minor abnormality, the physician may repeat the test to ensure accuracy.

If the pap test shows a significant abnormality, the physician may then perform a colposcopy using an instrument much like a microscope to examine the vagina and cervix. The colposcope does not enter the body.

- A Schiller test may also be performed. For this test, the doctor coats the cervix with an iodine solution. Healthy cells turn brown and abnormal cells turn white or yellow. Both procedures can be done in a doctor's office.

The doctor may also remove a small amount of cervical tissue for examination by a pathologist. This procedure is called a biopsy and is the only sure way to know whether the abnormal cells indicate cancer.

- The Cancer Association of SA can be contacted at the following toll-free number: 0800 226 622

*Source: The National Cancer Institute (USA)*

## Main Cancers affecting South African Women

**WOMEN (excl. Skin)**
Cervix (17,77%)
Breast (16,24%)
Colo-Rectal (4,08%)
Oesophagus (3,72%)
Uterus (2,96%)

**Asian Women**
Breast (29,23%)
Cervix (10.26%)
Stomach (6,51%)
Colo-Rectal (5,21%)
Uterus (4,56%)

**African Women**
Cervix (33,66%)
Breast (12,41%)
Oesophagus (7,32%)
Uterus (3,16%)
Liver (2,10%)

**Coloured Women**
Cervix (24,51%)
Breast (20,22%)
Colo-Rectal (4,61%)
Stomach (4,35%)
Lung (3,10%)

**White Women (incl.Melanoma)**
Breast (18,93%)
Colo-Rectal (5,41%)
Melanoma (3,77%)
Cervix (3,53%)
Ovary (2,44%)

*Source:S.A.Cancer Registry*

# 4 000 South Africans suffer from leprosy (89)

**Bhungani ka Mzolo**
Health Reporter

NEARLY 4 000 people in South Africa suffer from leprosy, a chronic disease affecting mainly the nerves, skin, nose and eyes.

This is according to the Leprosy Mission Southern Africa, which celebrated World Leprosy Day on Sunday.

The mission said though affecting people of all races and social levels, 90 percent of leprosy cases occur in the developing countries of Asia, Africa and South America – India, Bangladesh, Burma, Indonesia, Nigeria and Brazil.

The latest statistics released by the World Health Organisation indicate that an estimated five million people suffer from leprosy.

According to executive director of the Leprosy Mission in South Africa Mr Peter Laubscher, many victims live in remote or war-torn areas while some are too afraid to come for treatment because of the stigma in their community.

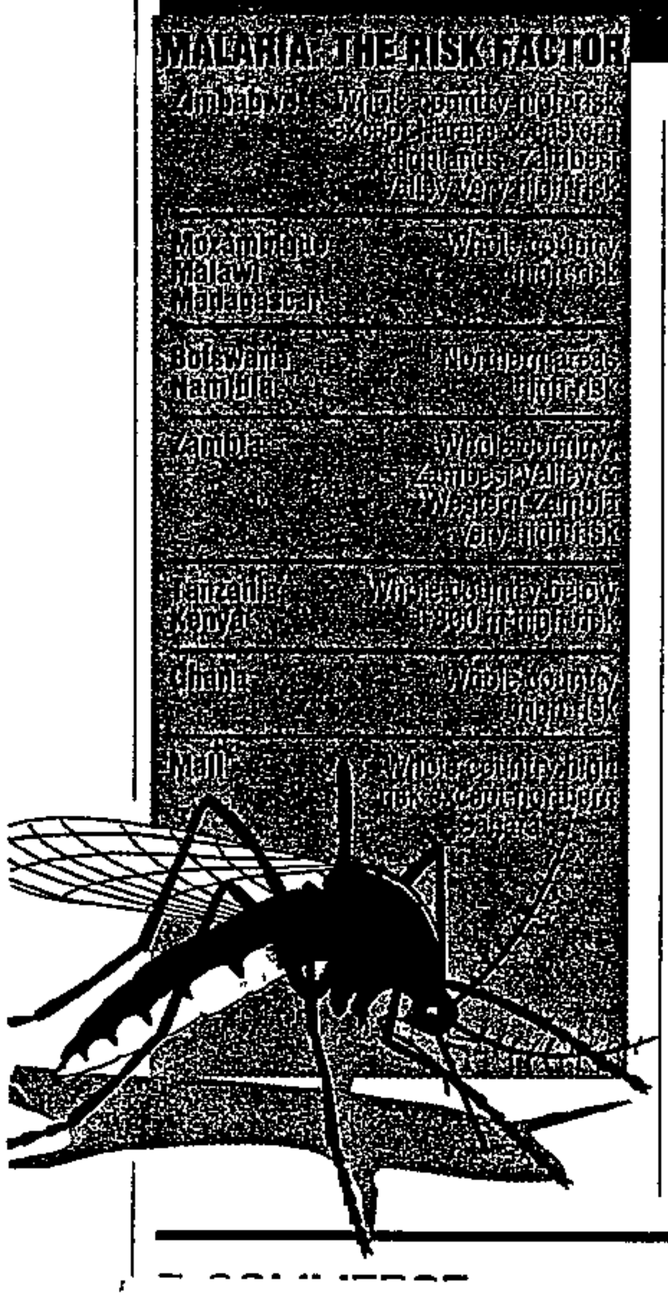
"Therefore the challenge of bringing leprosy under control worldwide by the next century presents a huge challenge but one we believe is possible."

Laubscher said if leprosy is untreated, it can lead to loss of feeling in the hands, feet and face, making sufferers vulnerable to injury because of the absence of pain.

"Neglected injuries can cause permanent damage and deformity while facial paralysis can lead to blindness," he said.

Laubscher said leprosy was caused by bacteria and is probably spread through droplet infection such as sneezing or coughing, but in most cases the disease is not highly infectious. "It is not hereditary, cannot be caught by a handshake, and most people have a natural immunity to the disease," he said.

Sowetan 2/2/99




MALARIA (89)

FM 5/2/99

# STING OF DEATH

Transafrica businessmen beware: a full-blown malaria epidemic is raging across the sub-Saharan region, and if you haven't taken your antimalarial tablets, a trip to Zimbabwe or Ghana could mean your death warrant.

Consider this cautionary tale. Last September a 54-year-old Johannesburg businessman, who travelled frequently to other African countries, went to Nairobi, Kenya. As it's considered a largely nonmalarial city, he took no preventive medication.

However, he squeezed in a weekend at a high-risk Kenyan game park. Ten days after returning to SA he developed fever and diarrhoea. He self-diagnosed a travel-related tummy bug and dosed himself with Imodium (an anti-diarrhoeal) and paracetamol.

During the third night of fever he complained of a severe headache. He was found in a coma the following morning, rushed to hospital and placed in intensive care where cerebral malaria was diagnosed. He died the following day. Large areas of sub-Saharan Africa are now considered "high risk" malaria areas (see chart).

Parts of SA are now high-risk too. There were 14 575 cases recorded in KwaZulu-Natal last year, and 112 deaths, compared with 4 117 cases and 20 deaths in 1995. Nationwide 25 841 cases and 182 deaths were reported last year, against 8 750 cases and 44 deaths in 1995.

There's an ambivalent attitude to prophylactics. A young man in his late 20s, who worked in Natal's Mkuze game park was advised by fellow workers and a local doctor not to take antimalarial medication as it "masks the disease and makes diagnosis difficult".

Last December, after the start of the rainy season, he developed a fever. Two days later he became delirious and was rushed to hospital. Despite vigorous and intensive treatment, including replacement blood transfusion, he died of severe malaria four days later.

Dr Andrew Jamieson, medical director of British Airways Travel Clinics, points out local citizens are the hardest hit by malaria. He adds that the most tragic statistic is the disease kills a child in sub-Saharan Africa every 15 to 20 seconds.

Jack Lundin

# Myths about leprosy dispelled

## Good news is that the biblical disease can be cured with modern medication

Star 13/2/99 (89)

By CLAUDIA MPETA

Mention the word "leprosy" and you're invariably bombarded with "jokes" and stories about limbs falling off and rotting faces. Although we live in an era where people are generally informed about Aids, TB and cancer, many myths still surround leprosy.

Jan Mahlangu is one of 4 000 South Africans who have contracted this disease, which many people associate with the Bible.

### Determined

Despite his suffering, Mahlangu is determined to learn and do as much as he can.

"I did not choose this disease. I am not going to hide in a corner and isolate myself," he says.

Mahlangu contracted the disease in high school while living in Kwa-Mhlanga, Mpumalanga.

"For 10 years, none of the doctors could tell me what was wrong. I started sweating a lot, my hands and feet started swelling, and at times I would have to spend months out of school because of the discomfort."

Mahlangu wanted to be a doctor but his affliction destroyed that desire.

"It was very frustrating. I had dreams, but because of this disease that no one could diagnose, I gave them all up."

Eventually, in 1986, his cousin, who had also contracted leprosy, advised him to go to the former Westford leprosy hospital near Pretoria.

"I felt as if my life had been given back to me when the doctors at Westford told me what was wrong. They gave me medication to kill the bacteria, taught me how to look after myself and, most importantly, counselled me on how to cope. The pastors at the hospital also encouraged and helped me."

Mahlangu now works as a clerk at the Gauteng department of education. His office walls are crammed with inspirational poems.

**STRIVING:** Jan Mahlangu looks forward to a bright future despite his affliction

"When I first started here, people were scared and used to gossip about me. I decided to ignore them and would only deal with those people who came and asked me to my face.

"A few people asked me about the disease and I told them that I am cured and that is why I am able to be among them. Gradually the word spread, and now people here know me."

Inspired by the counsellors at Westford and the Bible, Mahlangu is now in his second year of studying towards a theology degree.

"I have learnt that if those who suffer from leprosy have support and someone who can encourage them, and if they have a strong belief in God, there is nothing they can't do.

"Just because someone has an illness doesn't mean they should be discriminated against. We are all God's people."

Mahlangu's next goals are to obtain a driving licence and to get married.

Leprosy is caused by a germ which is distantly related to TB. Most of the world's population has a natural immunity to leprosy, making it among the least contagious of all infectious diseases.

The bacteria mostly affects the nerves on the skin, and sufferers eventually lose the sensation to feel pain, and any heat or cold in the hands and feet. As a result, minor burns or scratches and wounds are left unattended to. The infection that sets in gradually spreads to the bones. They decalcify and this calcium is reabsorbed into the body, resulting in fingers and toes "disappearing".

### Poverty

The most important thing about leprosy is that it can be cured. The multi-drug therapy given to patients won't bring limbs back but it will stop the bacteria from spreading.

According to Peter Laubscher, director of the Leprosy Mission in SA, there is a strong connection between the disease and poverty. "In South Africa there is not such a stigma attached to leprosy. South Africans are generally very tolerant towards these people," he adds.

# Transkei's daily bread may be kiss of death

## Staple diet of homegrown brew and samp linked to high incidence of gullet cancer

(89) ARG 19/12/98

**DAVID MACGREGOR**
Umtata

A toxin found in home-grown maize, the staple diet of many rural South Africans, could be behind the unusually high incidence of gullet cancer in men in the Transkei.

Now researchers are trying to discover why oesophageal cancer is on the rise among the coloured population of the Western Cape and are planning to check whether the migratory patterns in Transkei are affecting the incidence of the disease in the province.

Almost 500 000 black men, most of whom live in the former homeland, face an agonising death from the "silent killer", which is normally only detected when the disease is too advanced to cure.

But a cheap capsule used to test for cancer cells could save thousands like 53-year-old subsistence farmer Phindile Gidana.

Instead of preparing for festive season celebrations, his family is already mourning his looming death and making funeral preparations.

Time is running out for the reed-thin farmer, and doctors doubt he will even live to celebrate Christmas with his family.

Mr Gidana's body has finally reached the end of the road. He will not get to savour his renowned *umqombothi* (maize beer) and *umngqusho* (samp and beans) one last time.

In fact, years of quaffing litres of the homebrew could be the reason for his illness.

Mr Gidana has not eaten a morsel of food in the past two months, despite the sizeable harvest of mealies that lies drying in his rural kraal.

Knowing he was desperately ill, but not realising he had advanced throat cancer and little time to live, Mr Gidana withered away.

By the time a severely malnourished Mr Gidana reached doctors in Umtata, his only sustenance in recent months had been liquid. He could not even swallow soaked bread, which caused him to vomit.

He had become so weak his daughter, Nomalady, had to carry his stick frame on her shoulders into the bustling Umtata General Hospital.

Doctors say his cancer is so advanced that he will live for another "month or two".

Trying to fathom out why this cancer is more prevalent in black South African men – particularly those living in the Transkei – has prompted the formation of the national Oesophageal Cancer Research Group.

Established by the Medical Research Council and the Cancer Association of South Africa and funded to the tune of R3-million over the next three years, the ground-breaking project involves the universities of Transkei (Unitra), Cape Town (UCT), Stellenbosch, Western Cape and the Free State.

*'It is possible people are chronically overdosing on toxic fungus'*

The head of cardiothoracic and vascular surgery at Unitra, David Mugwanya, a Ugandan who was trained in Glasgow, says the late detection of gullet cancer is almost certainly a death sentence.

A co-director of the research group, Professor Mugwanya has spent the past 20 years working in the Transkei and claims the region is well known globally in medical circles for its high incidence of oesophageal cancer.

"Transkei ranks alongside China and Iran as a world hot spot."

Although cancer was previously thought to be prevalent in only some areas of the Transkei, the whole region has now been classed as a "hot spot", as well as certain areas in southern KwaZulu Natal.

Research by the Medical Research Council has revealed that a toxin-producing fungus in home-grown maize could be linked to the high incidence of oesophageal cancer.

Professor Mugwanya said there was a possibility that pesticides were stimulating the growth of a toxic fungus that made good beer but had major health implications.

"Every time people in the region swig homemade beer or eat samp and beans, they are taking a cocktail of myco-toxins. Corn is the staple food of the Transkei and it is possible that the people are chronically overdosing on the toxic fungus."

Mohammed Iqbal Parker, of the Department of Medical Biochemistry at UCT, said the high incidence in the region was because of a "combination of several factors", including dietary habits, selenium deficiencies in the soil, toxins, iron overload from traditional pots and certain vitamin deficiencies.

Selenium compounds have been found to possess certain properties that could prevent the development of cancer, and research is to be carried out on whether dietary fatty acids and micro-nutrients like zinc and selenium can retard the progression of early pre-cancerous lesions.

Professor Parker explained that there was also a possible genetic susceptibility in people in the region that, once it was identified, could be remedied through nutrients.

"There are no external symptoms of oesophageal cancer and normally by the time it is detected it is far too late. Once a person is showing symptoms of not being able to swallow then they usually have two or three months left."

But, if detected early, gullet cancer could be easily beaten. A major initiative has been taken in the region to test people for the disease using a cheap sponge in a capsule, a piece of string and a cup of water.

Developed 20 years ago in Japan, the Nabeya encapsulated brush helps detect early lesions in the throat. It takes a scraping of cells, which are then studied under a microscope.

The golf ball-sized sponge is wrapped in a capsule about half the size of a finger and attached to a long string. The capsule is rested on the tongue, with the string attached to a finger, and is washed down with water.

I made the mistake of trying to swallow the bomb in small sips.

With tears in my eyes and a pill lodged halfway down my throat, I suddenly wondered what possessed me to try the brush. After all, I was white, *umqombothi* and *umngqusho* had never been part of my staple diet and I had not spent years living in a "hot spot".

But, without trying the brush, I would have had to trust the experts' assurances that the procedure was painless and simple.

They were not far off the mark – if the capsule had been swallowed correctly. But it was uncomfortable trying to swallow the capsule, and having it slowly pulled back up your throat after it had expanded to the size of a golf ball with a rough spongy surface.

But looking at Phindile Gidana in the waiting room next door made me realise that the Nabeya brush was a painless alternative to the agonising death the old man was facing.

"The brush is very cost effective and is one of the easiest and best methods for the early detection of throat cancer. It is also non-invasive," Professor Parker said.

Researchers are also investigating local tea varieties in their attempts to prevent the development of throat cancer. Already research has indicated that green (Japanese) or Chinese tea drinkers are less at risk.

According to a new Medical Research Council paper, "previous research has shown that extracts of local teas have more potent anti-cell changing activity than either green or black tea. Evaluating the cancer-preventing properties of our local tea could have important implications for its possible use as an agent against oesophageal cancer".

Plans are also afoot to investigate why oesophageal cancer has risen suddenly among the coloured population of the Western Cape.

Although the project plans to target certain age groups and help detect and prevent the early onset of the disease, it has all come too late for Phindile Gidana and thousands of other South Africans. – @LiveWire

**THIS WON'T HURT A BIT:** doctor Joyce Jose, right, prepares to test reporter David Macgregor for gullet cancer. 'I nearly vomited several times'

# Silent killer that affects young and old

Star 20/3/99 (89)

By TWEET GAINSBOROUGH WARING

## Osteoporosis decreases bone density in young women who exercise too much and eat too little

Mary (29) is super-fit and has no history of injury, so she was stunned after taking part in a scientific study to learn she had osteoporosis, the bone disease normally associated with older women.

Mary is one of a growing number of younger women who train too hard and eat too little, and fall victim to the disease.

One in three South African women over 50 is affected by osteoporosis (brittle bone disease), also known as the "silent killer". But in this age of fitness and dieting, more younger women and even girls are also at risk.

A bone scan was the last thing Mary would have thought of having.

Biokineticist Lisa Micklesfield, who conducted the study, says that in Mary's case the early onset of osteoporosis could have been influenced by various factors.

She falls into the category of an over-exerciser who does running training five times a week for an hour, aerobics four times a week and circuit training three times a week. All this is done while training for a 56km ultra-marathon.

Her diet was found to be lacking in calcium and inadequate in energisers for the amount of exercise she was doing.

As a result of over-training and under-eating, her menstrual cycle stopped.

Micklesfield says amenorrhoea (cessation of the menstrual cycle) isn't restricted to elite athletes but is prevalent in physically active girls and women doing a wide variety of sports who try to reach unrealistic body weights because of social pressures.

The result is a syndrome referred to as the female athlete triad, in which disordered eating, amenorrhoea and osteoporosis are closely linked.

Scientific research is finding this syndrome increasingly present in young women.

Because of the lack of oestrogen that results when menstruation ceases (similar to the menopausal state), bone loss results, increasing the risk of osteoporosis.

After the age of about 35, this is inevitable because bone breakdown exceeds bone formation.

This process can't be reversed – it can only be lowed, through medication, healthy diet and exercise.

Low bone density is usually detected only when it's too late, when women break bones, the most common of which are the wrist and hip.

Low bone density has been found to be more common in young distance runners, dancers and other athletes who try to remain aesthetically pleasing and maintain low body weight.

Although exercise is important early in life to prevent the onset of osteoporosis, over-training can have a detrimental effect on bone development.

Micklesfield says bone constantly changes in response to different stresses on the body, and peak bone density is attained between the ages of 25 and 35 for men and women.

Adequate nutrition and exercise leading up to and during these years are essential to ensure a high peak bone mass.

Although the disease is more prevalent in women, one in three hip fractures occurs in men.

Other factors that may increase the risk of osteoporosis are:

- Fair skins, people of northern European descent and the so-called coloured people in South Africa;
- A family history of osteoporosis;
- Early menopause (before 45) or following a hysterectomy;
- Inadequate calcium intake over a prolonged period;
- Lack of exercise or excessive exercise;
- Smoking and excessive alcohol intake;
- Those on anticonvulsants, cortisone or thyroid drugs, or those on a high protein diet.

You can minimise your risk by modifying certain factors, one of which is diet.

Dietician Juha Goedecke says low calcium intake among teenagers is often the result of dieting.

"Many teenagers diet and in doing so forgo dairy products, which they see as fattening, while they are in fact important sources of calcium."

Goedecke says skim milk and other low-fat dairy products are as high in calcium and can be used in place of full-fat milk and other dairy products.

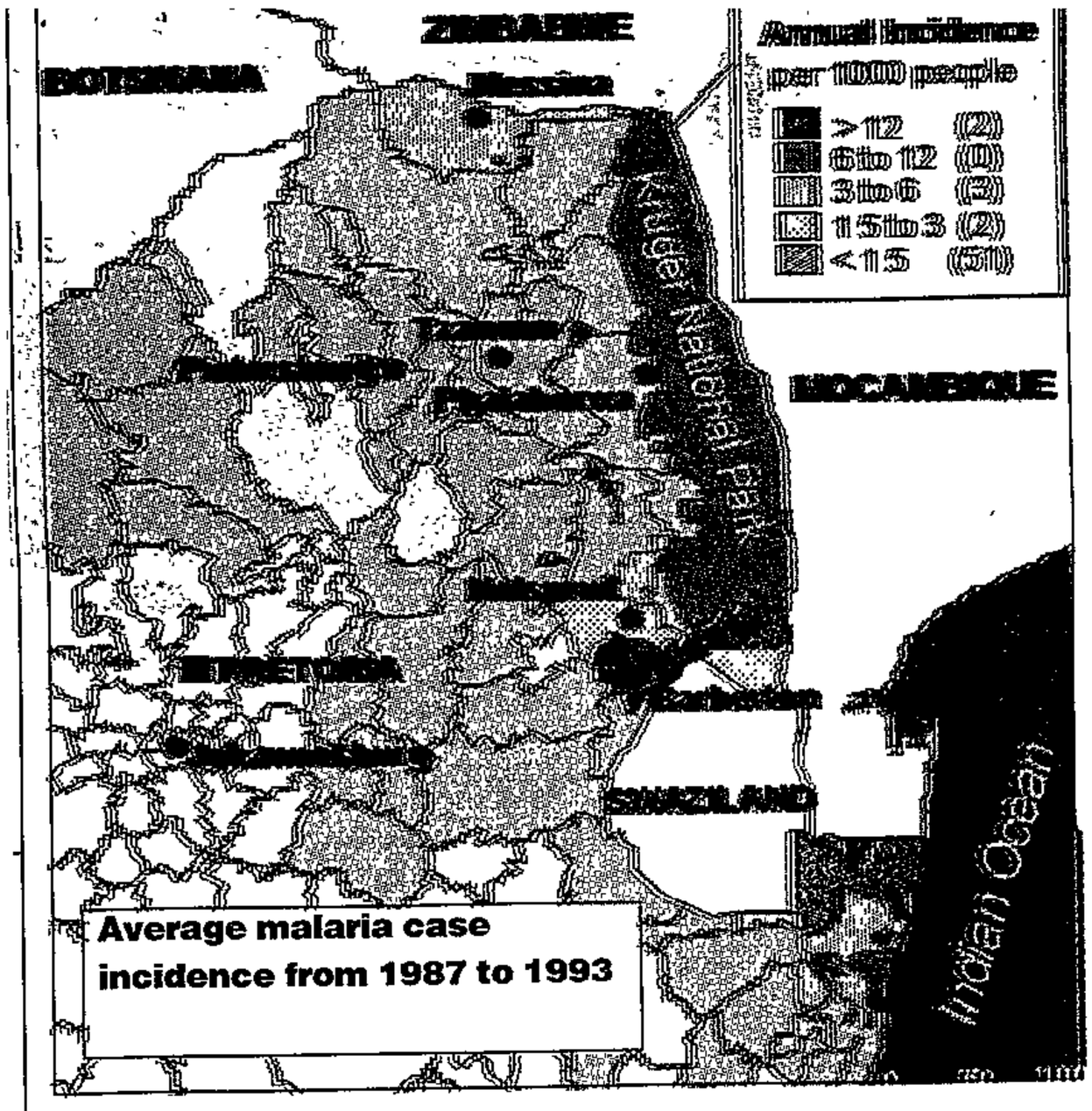
She stresses the importance of a balanced diet.

"Dairy is important, because although calcium is present in other foods it isn't as easily absorbed."

"Supplements can be beneficial to post-menopausal women, particularly if they have a dairy intolerance, or don't like dairy products," she says.

Exercise is another modifiable risk factor as it encourages bone growth. Active children mature with a higher peak bone mass.

The key to exercising for increased bone mass is weight-bearing exercise such as running, aerobics, squash or tennis.




# Africa unites to beat malaria

M+G 26/3-1/4/99 (~~95~~)(89)

**Greer van Zyl**

Scientists at the largest malaria conference ever held in Africa, which took place in Durban last week, were upbeat about forming alliances to fight malaria on the continent.

From humble beginnings in Dakar two years ago, the Multinational Initiative against Malaria (MIM) has burgeoned into a global movement aimed at controlling the disease that kills at least one million Africans — many of them younger than five — and infects up to 500-million people every year.

The MIM conference showed that malaria cannot be treated as a country-specific problem and scientists and control staff committed themselves to working together to find solutions to the public-health problem the disease posed.

KwaZulu-Natal MEC for Health Zweli Mkhize announced a tripartite programme involving the governments of South Africa, Mozambique and Swaziland to fight malaria in the region.

Many new approaches and breakthroughs came out of the conference. One particularly effective method of preventing malaria is the use of old-fashioned bed nets. Researchers showed that bed nets cost less than residual spraying of houses with insecticides and may be as effective.

Scientists were optimistic that a vaccine against malaria will be a reality in the next 10 years. However, they stressed there had to be an understanding of the parasite at its most fundamental level.

"The life cycle of *Plasmodium falciparum* is one of the great mysteries of biology, and understanding its genetic blueprint will help solve one of the most fascinating problems," said Professor Harold Varmus, director of the United States National Institutes of Health. A vaccine which covers all the stages of the parasite's life is already being tested.

An African-centred project aimed at pinpointing where malaria occurs on the continent is being steered by the Medical Research Council's Durban office. The final product of this data collection will be an atlas that will help policymakers and malaria control managers to plan effectively and direct resources appropriately.

The cost of drugs and the lack of commitment from pharmaceutical companies to develop new anti-malarials was highlighted. It was pointed out that because malaria affects the poor, there is little incentive to invest in drug development. While there are more than 100 antibiotics on the market, there are only 10 anti-malarial drugs, and the threat of multi-drug resistance looms ever closer.

"Drug resistance has complicated an already dangerous disease, and we need to educate rural people about drug compliance. We also need to empower African scientists to develop new drugs, so we need to keep capacity in Africa. Collaborative work will bring down the cost of clinical trials, and it's easier to get help from South Africa than Europe," said Professor Ayo Oduola of the University of Ibadan in Nigeria.

A major breakthrough has been the discovery of a herb that has excellent cure rates. The herb is known *as quinhaosu* — common wormwood — but the active ingredient, artemisinin, appears only in certain species of the weed found in China and parts of Africa. When taken in conjunction with other anti-malarial treatment, artemisinin derivatives produce better cure rates and are the faster acting than other anti-malarial agents. The drug is effective against multi-drug resistance.

WHO is working on an artemisinin derivative, artesunate, in suppository form, which is useful for seriously ill patients in rural areas who have no access to injectable anti-malarials, and who can use it as emergency medication while they get to hospital.

Artemisinin derivatives are not freely available in South Africa, but can be released on a named patient basis through the Medicines Control Council. However, this may prove to be extremely expensive for the individual.

*Greer van Zyl is head of media liaison at the Medical Research Council*

**By Bhungani Mzolo**
Health Reporter (89)

MORE than six million people in South Africa suffer from arthritis – a chronic disease affecting body joints, the Arthritis Foundation said.

To highlight Arthritis Awareness Day tomorrow, the foundation has planned information sessions where people will be educated about the treatment and how to cope with the disease.

There are more than 100 different types of arthritis, although the main types are osteoarthritis, rheumatoid arthritis and gout.

The foundation said although there is no cure yet, early diagnosis and treatment go a long way to help prevent further deterioration which could result in severe damage to the joints.

Ms Helen David, a physiotherapist, said X-rays and blood tests allow the doctors to determine which type of arthritis a patient is suffering from.

Osteoarthritis is the result of general wear and tear or trauma. Rheumatoid arthritis is the inflammatory disease of the tissues surrounding the joints.

"With osteoarthritis, the cartilage between two joint surfaces becomes worn and the soft tissue around the joint becomes swollen, painful and eventually shortened, causing stiffness or lack of mobility," David said.

She said beside the knees, hips and spine, other joints may also be affected, particularly after trauma such as sports injuries and motor vehicle accidents.

Physiotherapy and medical care are the key to management of arthritis.

● The Arthritis Foundation can be contacted at (011) 647-2346 or (012) 425-4738.

The South African Society of Physiotherapy (SASP) at (011) 485-1467

Sowetan 28/5/99

# Traditional healers join forces with science to fight malaria

ARG 4 5/6/99 (89)

Lusaka – Zambian traditional healers are collaborating with mainstream medical researchers in treating malaria, the tropical disease which accounts for more than 40% of deaths in hospitals.

"We're willing to co-operate with scientists to authenticate our traditional herbal medicines.

"We are co-operating not because of the money that would come from such research but to show the world that our medicines have curative substances," says Rodwell Vongo, president of the 35 000-member Traditional Health Practitioners Association of Zambia.

For starters, traditional healers are being asked to identify herbs to treat malaria.

A study by the Tropical Diseases Research Centre (TDRC) based in Ndola aims at identifying traditional medicines used in the treatment of malaria and to establish a liaison between traditional healers and modern medical practitioners.

According to qualitative surveys conducted by the National Malaria Centre in Lusaka, malaria is endemic and accounts for at least 60% of diseases in Zambia's health institutions.

The co-operation would end an age-old animosity between scientists and "traditional doctors".

Hitherto, traditional health practitioners have not rubbed shoulders with modern researchers for fear of losing "patents" of their concoctions.

Traditional medicines are guarded secretly and the formulas only passed on to a trusted member of the family or trusted friend.

"Our members have the herbs to cure malaria, which is the number two killer in the country, but we don't have the expertise and resources to determine the dosage, efficacy and toxicity in our traditional medicines," says Mr Vongo.

"So we're keen to work with the TDRC because they have the expertise to authenticate our drugs."

*We want to show the world our medicines have curative substances'*

Researchers at the TDRC will obtain demographic information on traditional healers who are treating malaria.

They will also collect traditional medicines from herbalists and store them in ideal conditions.

TDRC executive director Dr Tom Sukwa says on the institution's internet site: "A standard index card for use in classification and identification of traditional medicines is being devised.

"Crude compounds will be extracted from herbal plants to determine in-vitro efficacy of herbal extracts in cultured malaria. Researchers will then test profiles of the various herbal extracts using animal models."

Malaria, a tropical disease spread by the female anopheles mosquito, is the most common cause of outpatient attendance and hospital admission in all age groups in Zambia.

The incidence has increased steadily over the years, from 230 per 1 000 in 1984 to 333 per 1 000 in 1994.

This initiative is aimed at reducing mortality and socio-economic loss due to malaria, through systematic strengthening of national capabilities for malaria control within the context of Zambia's health reforms.

"The TDRC is also trying to identify and develop sites in endemic areas for possible malaria vaccine testing, to document malaria epidemiology including immune responses in individuals within endemic areas," Dr Sukwa said.

The proposed site is Fiwale, a rural community just outside Ndola on the Ndola-Lusaka highway where the TRDC has been conducting pilot studies on the use of insecticide-treated mosquito nets for malaria prevention in children and pregnant women.

The project is in collaboration with the Harvard Institute for International Development, the Harvard School of Public Health and the New England Medical Centre in Boston, Massachusetts.

There is at present little or no expertise in Southern Africa to assess possible insecticide resistance in natural populations of the malaria vector mosquitoes.

In 1997, malaria risk of varying degrees existed in 100 countries. In 92 of these, transmission included the malignant form of the disease.

More than 40% of the world's population lives in areas with malaria risk. It was reported in 1996 that the global malaria situation was serious and becoming worse.

Global estimates remain the same with the incidence of malaria at 300 to 500 million clinical cases annually.

About 1,5- to 2,7-million people die of malaria each year, and about one million deaths among children under five years of age are attributed to malaria alone, or in combination with other diseases, says the World Health Organisation.

Countries in tropical Africa account for more than 90% of the total malaria incidence in the world and the overwhelming number of malaria deaths.

# Take a deep breath ...

## Call the asthma helpline



**Thousands of parents have suffered the agony of watching their children gasp for breath – and doing the late-night run to the nearest hospital as another asthma attack strikes.**

Many other people have watched their loved ones die from asthma, in spite of this chronic condition being easily controlled with proper medication.

DI CAELERS
HEALTH WRITER

Cape Town is in fact one of the most allergy ridden cities in the world and allergens like housedust mites, pollen and pets push up the number of asthmatics – with the prevalence of asthma increasing dramatically here in the past 10 to 20 years.

Better news, though, is that while asthma is becoming much more common, aggressive preventative treatment is resulting in a drop in the number of asthma deaths

But Gill Ainslie, associate professor at Groote Schuur Hospital's respiratory clinic and Western Cape head of the National Asthma Education Programme, says deaths from asthma remain a major concern – because most are preventable with the proper treatment.

A Cape Town study of fatal and near-fatal asthma between 1980 and 1997 found marked differences in the asthma incidence in different race groups: for whites the rate was 1,9 per 100 000 people, for coloureds 7,4 per 100 000 people and for Africans 5,3 per 100 000 people.

Between 1980 and 1985 there were 89,2 deaths a year; from 1986 to 1991, 84 deaths a year; and between 1992 and 1997, 77 deaths a year.

"During these years the Cape Town population grew dramatically but there was a decrease anyway in the number of asthma deaths. But the reality is that our death rate is still three times higher than in the United Kingdom," says Professor Ainslie

He is the national vice president and Western Cape head of the National Asthma Education Programme, which was established in 1994 to help improve the quality of care and quality of life of asthmatics.

Together with Cipla-Medpro pharmaceuticals she also helped start a 24-hour Asthma Helpline for Cape Town at the beginning of the year, aimed at providing additional support, information and assistance for sufferers and their families.

"There are so many myths and so much ignorance about asthma People often borrow asthma inhaler pumps from other people – they think asthma is infectious, they think the pumps are addictive, and many think it's a nervous condition

"Through both the programme and the helpline we hope to dispel some of these myths and get across the correct information so people recognise the condition and get the correct treatment," says Dr Ainslie.

The helpline is run by clinical technologist Lata Jeaven, who herself has two asthmatic children She is literally only a telephone call away with help and advice, and if she cannot answer questions she can seek help from Dr Ainslie and the other respiratory clinic sisters

The education programme, on the other hand, facilitates asthma support groups at grassroots level. Leaders of these groups go through training in all aspects of asthma, including triggers and treatments.

Asthma affects about 20% of children and 10% of adults worldwide, but occurs mostly in the Southern Hemisphere – and particularly in urban areas Only a small percentage of sufferers have severe asthma.

It is not a nervous condition but results from inflammation of the airways which causes the airways to narrow, resulting in coughing, wheezing, a tight chest, a whistling sound when breathing, and shortness of breath. It comes and goes and is often at its worst in the mornings and evenings.

Some of the asthma triggers, as opposed to the causes, include pets, foods, exercise, viruses and climate. The causes can be genetic, or as a result of allergens or pollutants.

Dr Ainslie says inhaler pumps are the best treatment because they are not dangerous or addictive, and deliver the dose straight into the lungs without any side-effects

She also encourages asthmatics to use peak-flow meters, which measure the state of their condition. Patients blow into the meter and record their best "blow".

Then if they start blowing below three-quarters of their best level, they know they must double their medication If it drops below half or their condition does not improve, they need to see a doctor and get a course of cortisone pills.

Dr Ainslie encourages asthmatics to:

- Get regular treatment.
- Get their inhaler technique checked.
- Monitor their lung function with a peak-flow meter.
- Avoid asthma triggers as far as possible.

She says asthmatics must get to hospital as soon as they find their inhaler pumps don't work – because the narrowing of the airways means the medication is not getting into the lungs.

Patients are then given medication via a drip, get oxygen treatment and are put on pills and/or nebulised.

"People can die of asthma if it is not properly recognised and treated. Mostly they have waited too long to seek medical attention.

"Asthma deaths are always a tragedy because they're usually preventable," says Dr Ainslie.

■ The 24-hour Asthma Helpline number is (021) 396 1573.


**Breathing easy:** patient John Roman of Mitchell's Plain blows into a peak-flow meter to check the state of his asthma. With him is Gill Ainslie, associate professor in the respiratory clinic at Groote Schuur Hospital

### So what exactly is the disease?

**The key features of asthma are the three Ss:**

- **Swelling: of the lining of the airways.**
- **Secretions: increased, thick and stringy.**
- **Spasm: of muscles around airways.**

**Causes include:**

- **Genetic.**

**Triggers include:**

- **Allergens like pollen, housedust mite, dogs and cats.**
- **Pollutants.**
- **Pets and foods**
- **Exercise.**
- **Viruses.**
- **Climate.**

# Asthmatic recalls the 'night I nearly died'

DI CAELERS

**If your asthma medication is not working, get medical attention as soon as possible – because so much can go wrong quickly.**

This is the advice of asthmatic Cheryl Zimri of Noordhoek, who has experienced first-hand the terrors of asthma – she lost her sister to asthma, and four years ago very nearly died herself.

Ms Zimri, 44, who has two asthmatic children, has lived with asthma her entire life.

Three of her eight siblings are also asthmatics, including her sister, Gaynor Stoffels, who died 12 years ago at the age of 22.

Ms Zimri doesn't hesitate to recall her worst asthma experience, the night four years ago that she nearly lost her life.

Doctors, she says, told her they did not save her from death, but "had to go to the other side to fetch me back".

She was not feeling well that night and, after her children Candice, now 20, and Heath, now 16, had gone to bed, she increased her medication and used her nebuliser.

That is the last thing she remembers of that night.

Her husband Steve returned home at 10 pm to find her in a coma.

"He apparently picked me up, left the kids in their beds, and rushed me to Groote Schuur. By the time we got there – from Montana near Bishop Lavis, where we lived at the time – the doctors declared me dead.

"My husband thought it was over," Ms Zimri says.

Later, when doctors stabilised her and then transferred her to Somerset Hospital, her husband was told to gather the family members because she was not expected to live.

They predicted that even if she did, she would have brain damage.

But after seven days in the intensive care unit, Ms Zimri was on the road to recovery.

Since then her medication has been changed and she says her asthma is under control.

"But I'm very careful. In winter I get my flu injections, make sure I look after myself, and take all my medication as directed. That is very important."

## Advances in treatment

DI CAELERS

**South African asthmatics can now benefit from a breakthrough, with "once-a-day" treatment already being taken by about a million patients in 45 countries.**

Called Singulair, the Merck, Sharp & Dohme pharmaceutical company product is a long-term controller rather than a preventative medication, and should not be used for the immediate relief of asthma attacks, nor to prevent or treat asthma attacks brought on by exercise.

The new medication is known as a "leukotriene receptor antagonist" and works by blocking leukotrienes in the lungs that cause narrowing and inflammation of airways.

Among the leukotriene blockers – a new class of asthma medicines – Singulair is the first developed for adults and children as young as six, and the first and only developed for once-daily use.

It is suitable for the treatment and prophylaxis of mildly to moderately chronic asthma.

It is also the first, and so far the only, leukotriene blocker approved by the Medicines Control Council for prescription in South Africa.

Leukotriene blockers are the first new therapeutic approach to asthma treatment in more than 20 years, and are recommended for use in conjunction with steroid-based treatment, the cornerstone of traditional asthma therapy.

They may even help reduce the use of this treatment.

# Expensive Hib vaccine for free at public clinics

ARG 29/6/99 (89)

DI CAELERS
HEALTH WRITER

**South African children are to be vaccinated free of charge against the Haemophilus influenza type B – or Hib – bacteria that can result in pneumonia, meningitis and septicaemia.**

The national health department announced that from July 1 the Hib vaccine would be included in the South African Childhood Immunisation schedule.

Previously, this expensive vaccine that prevents deadly disease was available only from private practitioners. It will now be available at all public clinics.

The Hib bacterium lives in people's noses and throats, according to the department. While it does not usually cause disease in those with a normal immune system, it can result in severe disease and even permanent damage or death in children younger than five who have not been vaccinated.

It is spread in droplet form from one child to another when an infected child coughs or sneezes, or shares toys which he or she have put in their mouths.

Creches, daycare centres and other places where young children come in close contact provide ideal conditions for the bacteria to spread.

The department says that Hib infection can also infect the joints, bones, tissue under the skin, the membrane surrounding the heart, and the larynx and pharynx.

Death or permanent damage occurs especially in infants who are malnourished and those under a year old. Some who survive Hib meningitis end up with permanent brain damage.

# Leading nations must help to beat malaria

## Drug companies spend more money on finding cures for diseases prevalent in rich countries as their markets are more lucrative, write **Jeffrey Sachs** and **Michael Kremer** of the Financial Times

(89) BD 7/7/99

THE world has a rare opportunity to roll back the scourge of malaria, a disease that has haunted humankind for centuries and has widened its death grip in recent years.

Nobody knows the exact extent of malaria, which may reach 500-million cases and 2,7-million deaths a year, but all agree that the toll on human welfare and economic development is profound.

Advances in science have now made it possible for us to seek to eliminate the disease. We believe the key to success lies in harnessing the world's biotechnology industry in the struggle.

Great strides in vaccine research and in the science of malariology offer realistic hopes that an effective antimalaria vaccine may be developed in a decade. Sequencing of the malaria genome will soon be complete and promising potential vaccines have been identified. The critical problem is finding money for research, development and distribution. There is simply not enough money in malaria as drug companies know.

Malaria is a tropical disease in which a parasite is spread between humans by the bite of an infected mosquito. Since the mosquitoes transmit the disease only in warm temperatures the disease is highly concentrated in tropical climates.

However, people in the tropics are overwhelmingly poor and in no position to pay for vaccines. Drug companies have little incentive to research vaccines for them.

As a result malaria vaccine research is carried out mainly in government research institutes, all suffering from underfunding and competing claims on scarce budgets. The Wellcome Trust estimates worldwide malaria research amounted to $84m a year or perhaps $42 a malaria fatality.

This expenditure is tiny relative to that on diseases affecting richer and more temperate areas. For example, research funding for asthma is about $800m a year or $500 a fatality. In short, the 2,4-billion people in the tropics who are vulnerable to malaria provoke remarkably little research effort.

In an important meeting in Washington in 1995 some of the world's leading scientists in malariology recognised that "a malaria vaccine is feasible" but that a "coordinated strategy for vaccine development ... is essential".

We believe that these scientists identified part of the solution, by calling for increased support for public malaria research and a malaria vaccine development board to help mobilise global science. However, we think an additional step is needed. The key is to bring the private sector into the development process.

Government research institutions support much basic scientific research on malaria.

Indeed basic research has produced fundamental and much-needed breakthroughs in our understanding of malaria and vaccines over the past decade.

It is costly and time consuming to move from the basic science, such as the mapping of the malaria genome, to development of an effective vaccine.

Governments in rich countries are reluctant to commit these funds without a guarantee that a vaccine will be effective.

Pharmaceuticals are developed by profit-orientated private companies. It costs about $300m to develop, test and bring to market a new medicine. A malaria vaccine may cost several times as much, given the scientific challenges involved. Such development costs are a critical barrier to developing an effective vaccine. Without a sizeable market at the end of the process, no private company will undertake the risky and costly path of vaccine development.

That market is nowhere in view. Not only are malaria victims poor but existing international agencies that might buy the vaccines on their behalf are strapped for cash.

They would also seek to negotiate a very low price for the vaccine once it was developed. This price might cover the marginal production cost of a vaccine but not the cost of development.

We propose that public policies should be organised to provide an adequate market at the end of the development process. Leading governments should pledge today that they will help purchase for mass distribution an effective malaria vaccine when such a vaccine is developed — and pay a realistic price that covers development and production.

No public money would have to be spent until an effective vaccine is found. No large bureaucracy would be needed to choose among scientific approaches or subsidise development efforts although government support for basic research would continue.

Nor would any government agency have to decide in advance who is worthy to lead the anti-malaria campaign. We believe in a decentralised approach, in which the smallest to the largest private biotechnology and pharmaceutical companies are given an incentive to search for an effective vaccine.

Market forces rather than unwieldy public agencies would be harnessed to tackle the key steps in vaccine development.

Such a programme need not be prohibitively costly. About 90% of malaria cases, including almost all of the worst variety, are in sub-Saharan Africa. About $250m a year would be sufficient to buy vaccine for the 25-million children born in Africa each year at $10 for a course of treatment.

Even at $40 a child — a large amount for a vaccine widely distributed in developing countries — the cost would be only $1bn to produce a vaccine worth many times that amount.

A committee of experts could establish criteria for eligible vaccines and determine procedures for purchasing vaccines.

Foreign aid to Africa now totals about $16bn a year so that at $10 a child the antimalaria effort would amount to 1,5% of total aid.

Unlike aid programmes of uncertain effectiveness, the vaccine funds would only be spent when a proven vaccine was developed.

Spending such sums each year would be a very small price to help protect Africa against a disease that kills 2-million or more people a year and that cripples economic development.

With the financial backing of the richest countries mobilising the world's biotechnology and pharmaceutical companies, we could realistically hope for a breakthrough in malaria that could give new hopes for billions of people in the developing world. Indeed, once such a breakthrough is made possible, it is hard to imagine that the opportunity will not be grasped.

*Sachs is professor of economics and director of the centre for international development at Harvard University. Kremer is professor of economics and the Massachusetts Institute of Technology.*

# Final lap in race for polio-free world

## Outbreaks spark new urgency before 2000 deadline

ARG 9/7/99 (89)

**London – The World Health Organisation has entered the final stretch of its campaign to eradicate polio.**

By the end of 2000, it plans to relegate the crippling disease to history books.

The number of worldwide polio cases has dropped by 85% since the WHO launched its initiative in 1988, but a large outbreak of the disease in Angola and pockets of India and Africa has prompted renewed efforts to meet the target date.

"It won't only be about eradicating the polio virus, the risk of the disease, but also the $1,5-billion (about R9-bn) in expenditures for a year right now will be written off," said Dr Bruce Aylward, co-ordinator of the WHO Global Polio Eradication Initiative.

The programme will concentrate on five conflict countries, including Afghanistan, Angola, Democratic Republic of Congo, Tajikistan, Somalia and Sierra Leone, where so-called "days of tranquillity" or peace will allow mass vaccination campaigns known as national immunisation days.

It will also focus on Bangladesh, Ethiopia, India, Nigeria and Pakistan, where the disease is concentrated.

"These are the key countries we're looking at – the big geographic priorities. These countries are coming forward with some extraordinary plans in terms of acceleration," said Dr Aylward.

The resolution to speed up the campaign was passed unanimously by the WHO's World Health Assembly in May, when 46 countries pledged to meet the target.

National strategies have been devised with the governments of the countries concerned. They will be run locally under the co-ordination of the WHO.

"This is a key time for us. The political commitment is there. The countries have just confirmed that. We need the partners to make this a reality and we just had a major partner, De Beers, demonstrate a whole new way of working for us," said Dr Aylward.

*'It's not only about the virus, but also about the R9-bn in expenditure that will be written off'*

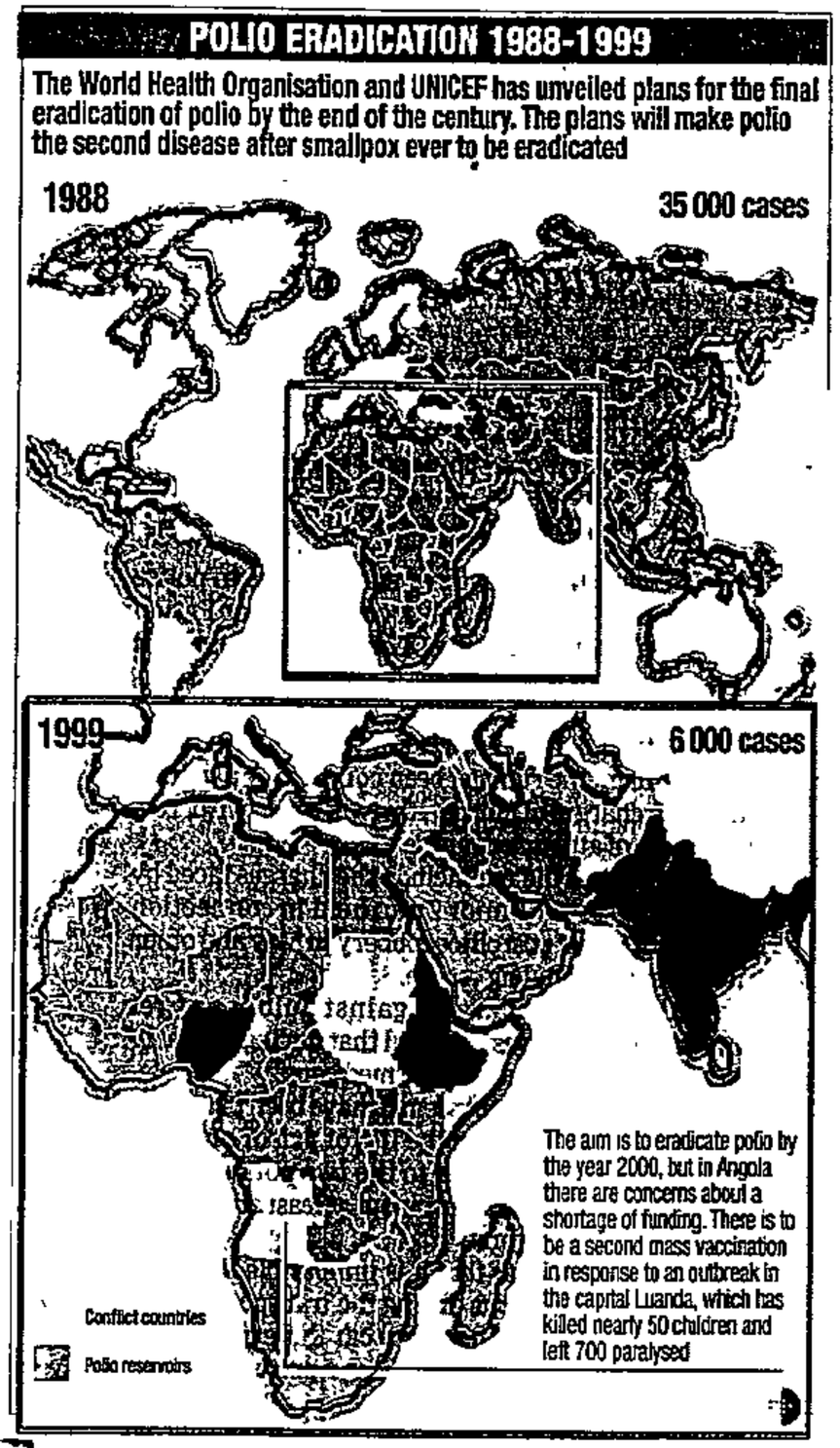
De Beers, the global diamond giant, is contributing almost a quarter of the cost of the national immunisation days in Angola this year and next. Rotary International, the United Nations Children's Fund, the World Bank, research charities and governments are also sponsoring the project.

The eradication programme involves routine immunisation of children soon after they are born and vaccination of all children under five, regardless of whether they have been vaccinated before.

National immunisation days are held over a few days and repeated a month later. In polio endemic countries, usually two rounds of vaccination a year for at least three consecutive years are needed.

Any case of a paralysis will also be examined to see if it is caused by polio and a mop up campaign involving one to two million children will follow.

"The goal of this initiative is to reach children who aren't being reached and to rethink the way we're delivering services," said Dr Aylward. – Reuters



# Cancer not a 'whites-only' killer

(89) CP 1/8/99

## Staff at a Soweto-based cancer care centre want to raise awareness of the threat this disease poses to our black community, writes ANDILE NOGANTA

EVEN in Soweto, few people know about a cancer care centre known as Elukholweni that has been in operation since 1982.

This is despite the remarkable opera and jazz diva Sbongile Khumalo being the patron of the centre.

One of four people who staff the centre, Meisie Rannoko says: "People don't know about the centre that's been right here in Soweto for 12 years." Elukholweni Cancer Care Centre is situated on an obscure backstreet in Orlando East. It is housed in a block of classrooms that have been converted into neat little dormitories for the sick and extended to accommodate an equally tidy administration block.

The classrooms were donated by the Presbyterian church, which also runs a day care centre on the same premises.

Apparently Mokoena street in Orlando East is a pretty unsafe place as well. The Cancer Association minibus that normally transports patients from chemotherapy and deep x-ray treatment (dxt) sessions at the Johannesburg and Hillbrow hospitals has on more than one occasion escaped being hijacked.

So now the patients have to wait around the hospitals until quite late waiting for a less 'hijackable' mode of transport – a larger bus.

Having come through the gruelling chemo and dxt sessions, this waiting can take a heavy toll on patients.

Elizabeth Mahlangu, a mother of two from Daveyton on the East Rand who has been in chemotherapy for the last month, says she has been struggling to overcome the fatigue that follows each session, and has had to contend with painful mouthsores.

But the treatment is working, because the cancer had been nipped in the bud before being able to snake its way through the rest of her body.

Depending on the type of cancer and its stage of advancement, the chemotherapy or deep x-ray treatments – applied to burn cancer cells and stop their spread – often follow surgery to remove the cancer growth. The treatment also helps relieve pain.

Mahlangu says the pain has been relieved, but her treatment has had to be extended by another month.

She is going to visit home this weekend, but will have to return for a few more weeks at the centre.

Mahlangu had surgery early this year to remove a malignant growth in her breast.

She is one of about 25 patients who stay at the centre But what is it that the centre does that hospitals don't?

Lulu Ngcepe, a social worker at the centre, says they take cancer patients who do not have to stay at hospitals but find it difficult to travel to the regular treatments.

"The kind of patients that come here are not confined to bed. They can still do things for themselves, like going to the bathroom and to the kitchen.

"The centre also relieves the pressure on the hospitals.

"We keep the patients here so that they don't default on their treatment. For instance it is not always viable for patients from Lesotho or the East Rand to travel to the Hillbrow or Johannesburg hospitals for treatment every other day," she says.

The centre also offers counselling services for patients, getting them closer to the larger community by organising group sessions with outpatients.

"They share experiences of treatment and diet. They get support from each other and empower each other ... getting information from someone who is affected does make a lot of difference, compared to hearing it from me who is not suffering from the disease," Ngcepe says.

Starting tomorrow Rannoko and her colleagues, Ngcepe, Cynthea Wilson and Nomsa Nhlapo will begin a week of teaching the public about cancer.

They say they will be out at malls and shopping centres around Johannesburg, talking to people about the disease, before the campaign ends with an open day at the centre on Saturday.

"The whole week is intended to create an awareness of cancer as a life-threatening disease. We are saying this disease is real and it kills all people, because there is a perception out there that it is a white disease. We want to say that cancer exists in our communities too," Rannoko says.

The rallying point of the South African Cancer Association has always been that cancer can be beaten, and this will be the core message of next week's campaign.

For the people at Elukholweni the concern now is that the message must start to reach black people. The use of a white cricket player who had beaten cancer in a television advert for cancer research should not be interpreted as a message that the disease is a 'whites-only' problem.

With next week's campaign the people at Elukholweni will be waking Soweto to the fact that there could be more cancer of the oesophagus in the township than there is in Sandton, for example.

The Cancer Association says the annual incidence of oesophageal cancer in the black population is 25 per 100 000, 20 more than in white communities.

Similarly, there is a striking prevalence of cancer of the cervix among black people: 40 per 100 000, compared to nine per 100 000 white women.

It is believed these figures are a stark illustration of differences in lifestyle and exposure to risk factors of black and white South Africans and make for an interesting study of these factors.

The one type of cancer that has traditionally afflicted more white people is breast cancer, with figures 64 per 100 000 women. The Cancer Association says medical research has been unable to explain the racial distribution of this disease.

But research is registering victories all the time. The Cancer Association says some breakthroughs have been made in the fight against liver cancer, a vicious type of cancer afflicting and claiming the lives of people under 30 throughout black Africa.

The Cancer Association says the research on this type of cancer, part of which was carried out in the Wits University labs of Professor Mike Kew, represents the best of research projects supported by the association.

But sadly a campaign that wants to tell the public that cancer is prevalent in black communities, that people mustn't hide it because it can be cured if detected early, will depend on the pulling power of showbiz.

Staff at the centre, desperate to gain maximum impact with the education campaign next week, are still hoping against hope for nothing short of a guardian angel

They fear the campaign may fall flat without the participation of personalities people identify with, celebrities who can be seen helping to spread the message at the shopping malls.

On Saturday Khumalo will be doing her bit to help the campaign.

And South Africa's boy with the golden horn, Hugh Masekela, is expected to cook his speciality for the fund-raising lunch (apparently his gizzard stew is almost as legendary as he is).

For fund raising on the day Rannako and company are making do with only a couple of soft drinks crates donated by a major soft drinks company.

Last year the company only managed a banner advertising the cancer awareness week.

And black business has also been nowhere to be seen.

While black business tycoons splash out to the tune of R50 000 on auctioned jackets for other causes organised from Sandton, none of the new black elite in leafy Rosebank and Northcliff has supported a project right in the middle of Soweto!

**BEATING CANCER**... Meisie Rannoko (extreme left) and colleague Lulu Ngcepe tackling the cancer campaign, and publicising their centre this week. Miriam Senne (middle) who now works at centre survived breast cancer *Picture: Mpho Mphotho*

# The hangover that lasts a lifetime

(89)

**ADELE BALETA**
SPECIAL CORRESPONDENT

**The City Hall's carillon bells pealed out over Cape Town today to draw attention to the thousands of children born with mental and physical defects to mothers who boozed while pregnant.**

Last year, a pilot study revealed that the Western Cape had the world's highest reported level of babies born with Foetal Alcohol Syndrome.

Today – 9.9.99 – is International Foetal Alcohol Syndrome Day, and bells were rung at 9.09am around the world, starting in New Zealand and moving across the time zones to end in the United States.

The plight of such children is close to the heart of Vivien Lourens, a Pinelands woman who fostered an affected baby girl, Tisha, at the age of 10 weeks.

That was three years ago and the trauma of witnessing Tisha's "excruciating pain" while experiencing alcohol withdrawal symptoms is behind them. But Mrs Lourens's mission is not.

Apart from various physical abnormalities, these children have learning disabilities, behave inappropriately and are easily influenced, which makes them

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# The hangover that lasts a lifetime

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them vulnerable to co-option by criminal gangs.

Frustrated by the lack of public awareness, Mrs Lourens and other concerned parents of "booze babies" around the world decided to take action today.

"We decided on the idea of ringing bells in cities across the globe at 9.09am on the 9th day of the 9th month of the year in 1999 for a 'magic minute' to remind women not to drink while planning to conceive, during their nine months of pregnancy or while breast feeding."

Mrs Lourens said that Tisha was supposed to be in her care for six months. "We fell in love with her and could not send her to a children's home and so she stayed."

Tisha is small for her age and she will face developmental difficulties, but being at the receiving end of one of her spontaneous hugs and watching her giggle as she plays with her siblings shows there is hope.

In the Western Cape, health professionals estimate that the cost to the provincial government for the "hangover that lasts a lifetime" is about R14-billion a year.

Colleen Adnams, a developmental paediatrician at the University of Cape Town's Child Health Unit, who is researching the syndrome, said there was no cure and sufferers would always need the support of their communities.

"Those who are (seriously affected) are protected in that they are recognised early and services are provided for them," she said. But many slipped through the net, landed on the streets and were most likely to be manipulated by others.

A single binge could result in a child being born with the syndrome, but genetic susceptibility varied, she said. "The bottom line is that no-one knows who is susceptible and who is not. It's best not to take a risk."

Professor Denis Viljoen, head of genetics at the University of the Witwatersrand and director of the Foundation for Alcohol Related Research, is investigating the prevalence of the syndrome in the Eastern Cape and Gauteng. He said it was erroneous to believe sufferers were concentrated in the winelands of the Western Cape with their culture of drinking.

ARG 25/26/9/99

(89)

South Africa is planning cross-border raids with a difference. **Harry Mchunu** investigates

# South Africa on the warpath against malaria

South Africa has declared war on malaria and is planning a R40-million programme aimed at eradicating the mosquito-borne disease that is threatening Southern Africa's economic development.

Health Minister Manto Shabalala-Msimang and her counterparts from Mozambique and Swaziland plan to sign a protocol next month binding each country to the programme which will include spraying areas in all three countries with environment-friendly insecticides.

The disease has shot up this year with 22 000 cases having been recorded as opposed to about 10 000 cases last year.

The disease is crippling the Ndumu Clinic, south of the Mozambique border, where five of the seven nurses have malaria. The clinic has run out of beds and this week patients were lying on tables and benches.

"It is a problem when even nurses fall victim to this disease. This is a shock," said KwaZulu Natal Health Minister Zweli Mkhize who visited the clinic this week.

The nurses also complained to the minister about the non-availability of drugs. "We are forced to divide one capsule into two so that we can help more people," a nurse told Mr Mkhize.

*'We have to divide one pill into two so we can help more people'*

The corridor between Ndumu and the Tembe Elephant Park is the preferred illegal entry point for Mozambicans. Screening for malaria has shown that more than half the people who entered South Africa from Mozambique carried the disease.

South Africa picks up the tab for their treatment, but Mr Mkhize wants to end this haemorrhaging of South African resources.

"We probably need to formulate a way to go back to Mozambique and say 'you owe us so much for the number of malaria cases from Mozambique we have dealt with'," Mr Mkhize suggested.

Deaths have increased four-fold since the 1996 epidemic, a report from KwaZulu Natal malaria co-ordinator Jotham Mthembu said.

The recent increase of the epidemic has raised fears that it may hamper the Lebombo Spatial Development Initiative (LSDI) which aims to transform the region into an economic powerhouse with tourism as the main contributor.

Mr Mkhize said tourists would need to be advised how to protect themselves against malaria. The increase of the disease has fuelled fears that it may spread further south and ultimately countrywide.

Mr Mkhize confirmed that he had received a letter from Minister of Tourism and Environmental Affairs Valli Moosa informing him that the provincial department of health would also be involved in the malaria programme.

**GETTING CONNECTED:** malaria sufferer Zanele Ndlozi meets provincial Health Minister Zweli Mkhize at a clinic where more than 70% of the nurses have the disease

## Low-risk area was no protection

Fighting for her life, an Empangeni woman is among an increasing number of people in KwaZulu Natal who have contracted malaria, causing alarm among health authorities.

Ida Jacobs and her husband, Kokkie Jacobs, were at their home, 8km from Lake St Lucia, when they took ill. Although they had been bitten by mosquitoes, they thought nothing of this as they lived in a low-risk area. At first they thought they had flu.

Mrs Jacobs, 57, is in critical condition in Empangeni Garden Clinic High Care Unit. She has cerebral malaria, which is the most serious form of the disease. She also has kidney and respiratory failure.

According to the National Malaria Control Programme, high risk areas used to be confined to far-north Zululand and north-eastern parts of the province.

However, doctors in former low-risk areas such as Empangeni and Richards Bay say they are treating more malaria cases. The malaria-carrying mosquito has been seen as far south as Tongaat.

The Jacobs family doctor from Mtubatuba, Dr Willie Offermeir, said he had diagnosed about 10 patients mostly from the Dukuduku Forest area in the past week.

Ngwelezana Hospital doctor Ajay Naidu said that they were receiving more cases from urban areas.

He said that in the peak malaria period in May they treated up to five cases a day, with roughly two out of 10 being fatal.

National Malaria Programme senior scientist Barry Bredenkamp said that the malaria incidents were unusually high this year in comparison to the last 20 years.

IN THE '80s the Nats decided to prop up a bantustan with rice. However, instead of providing apartheid KwaZulu with a sustainable source of income, it gave a populous rural area a malaria epidemic.

The plan, by the then Department of Development Aid, was to turn the largely impoverished and underdeveloped area of the Makhatini Flats into a "little Asia"; the R400-million Mjindi-Makhatini irrigation scheme was designed to flood the area with rice paddies and provide the homeland with a cash crop.

The plan worked. For a while. Then came the malaria.

The co-ordinator of the Department of Health's malaria control programme in the region, Jotham Mthembu, says: "They never consulted anyone ... Weighed up against the health of the people it just wasn't economically viable."

The plug was pulled on the scheme in 1994.

This week, malaria's role in retarding development was again recognised with the signing of a historic agreement between South Africa, Swaziland and Mozambique to launch a five-year programme to control the spread of the disease across the region. The R40-million project has been set up through the Lubombo Spatial Development Initiative — an initiative that will kick-start economic growth in the region

A protocol signed in Johannesburg on Thursday created a Regional Malaria Control Commission of scientists, public health professionals and malaria control programme managers from the three countries.

Dr Brian Sharp of the Medical Research Council's Malaria Research Programme says: "One cannot easily separate development issues from health issues. Malaria control can be sustained only if it is linked to economic development." For Sharp the protocol is the culmination of efforts that started as early as 1993 when talks between health officials from the three countries were initiated by the council.

The protocol couldn't have come at a better time, say public health officials, who are gearing up for the worst malaria epidemic since the '30s, when, in eight months, 22 000 people died of malaria in KwaZulu.

Reports at the time said: "Huletts representatives had visited hundreds of planters, whose average work force was 80, but typically only three were reporting for work. The Amatikulu mill was receiving only one truck load a day (five tons of sugar cane) instead of the expected 1 500 tons The *induna* (headman) in the Umvoti area pointed out a kraal where all five family members had died within six weeks."

*LAURICE TAITZ discovers that the region is finally uniting against the malaria plague*

# Africa bites back

(89)

ST 17/10/99

This year, at Ndumo clinic in the Ingwavuma district, in north-eastern KwaZulu-Natal, the toll of a mild winter is already starting to be felt. The busiest of 10 primary health-care clinics served by the Mosvold Hospital, Ndumo recorded 1 944 malaria cases last month. Last year, there were just 74 cases.

Sister Eldah Nsimbini says 13 out of 14 nurses at the clinic contracted malaria this month. "The only one who didn't was on leave," she says.

At the clinic's test centre, patients silently queue for results. The recent introduction of rapid tests — using a spot of blood — is a huge improvement on earlier methods as quick diagnosis and treatment can mean the difference between life and death. The progression from mild flu-like symptoms to a fatal coma can take as few as 24 hours.

In Ndumo, malaria mortality figures are low Health officials attribute this to effective public health programmes.

In the Ingwavuma, Ubombo and Eshowe districts, spraying with synthetic pyrethroids, a safe, odourless and environmentally friendly substance derived from an East African plant, is the backbone of malaria control.

Every year since World War Two, between September and December, all houses in the districts are sprayed. Mthembu says: "We send someone to run ahead to every household to tell them to take out their belongings because tomorrow we are coming. People co-operate now because they know."

This wasn't always the case.

"In the days of DDT," he says, "people often used to just lock their homes for the day and leave before we got there. They didn't like the DDT. It smelled bad, took hours to dry and they said it made the walls dirty."

DDT was banned in most countries in the '70s. However, as there were no viable alternatives, the harmful pesticide was still being used in the Third World until a few years ago.

The spray used now dries in minutes and lasts eight to nine months. "Mosquitoes can't settle on the walls. They get infected and then fly around until they die," says Mthembu

But spraying is costly, particularly when its efficacy is compromised by the lack of similar programmes in neighbouring countries. Swaziland has been spraying for the past decade. In terms of the tri-nation agreement, Mozambique starts in January. Bed nets dipped in the same insecticide are another option being explored.

Korea Gumede, the manager of the Ndumo malaria control programme, says: "We are looking at how effective bed nets are. We have had a project running here that compares bed nets with spraying. Bed nets cut down malaria cases by 16 percent. But before we introduce them we need area committees that will organise where they will be sold and reimpregnated with insecticide every six months."

He says when subsidised bed nets were first brought into the area for sale, "We found people weren't using them. Instead, they were reselling them in Mozambique at a profit."

This week the World Health Organisation launched a "One bed net for every African child" campaign as part of its Roll Back Malaria initiative. The plan is to provide 60 million African families with insecticide-treated bed nets over the next five years. "It is scandalous that 700 000 African children died last year from malaria when a $4 [about R24] bed net could have saved them," said David Alnwick, chief of health for Unicef.

"Malaria is a disease of poverty," says Dr Hervey Williams of Mosvold Hospital. "If you're poor you don't have the resources to protect yourself.

"When you are living on the breadline, a mosquito net costs a lot of money. When you are living in a hut, where do you plug in your mosquito coil? You have to raise living standards."

Gumede notes: "Reed huts are loved by mosquitoes. They can't rest on corrugated iron."

The Mbatha homestead in Ndumo is typical of the region. Made up of a number of huts, it houses three generations of the Mbatha family. Mostly unemployed, they rely on one pension for their income. The Mbathas know the cost of malaria — the family patriarch died of it in 1995.

As at other homesteads in the area, when the sprayers come, the green card comes out. It plays a vital role in the mapping system put in place by the Medical Research Council in 1959 to keep track of the disease at homestead level. The card notes the family details and when the house was last inspected, and keeps track of malaria cases.

Surveillance and monitoring are done by an agent who cycles to about 20 homesteads a day, taking blood samples to be screened for parasites. If the test results are positive he returns. Once a person starts treatment he will follow it up by retesting them to see if it's effective. In these districts anyone arriving at the clinic with a fever gets tested. Last month, two out of three patients tested were positive.

Williams says: "You have more chance of surviving malaria here than you do in Richards Bay. There they'll first treat you for flu. In Groote Schuur they'll write you up in a paper and publish it." The gory stories of travellers returning home with deadly malaria are misleading — often it's because of misdiagnosis, allowing their condition to worsen.

Pharmacist Lee Baker says another reason travellers come home with malaria is that people often stop taking medication once they have returned from a malaria area. But it takes about 10 days for the symptoms to appear, and the drugs that interfere with the parasite's life cycle are by then no longer effective. "You won't always know if you have been bitten," she says.

At the same time, options for treating malaria are being narrowed by increasing drug resistance. Chloroquine, once the front-line treatment, is slowly becoming redundant. Resistance to it was reported in Kenya and Tanzania as early as 1979. It was first detected in South Africa in 1985. Since then, drug policy has been changed.

A key project of the malaria protocol will be a five-year regional study looking at drug resistance and at the use of combination treatments to combat its increase.

Only a fraction of the billions spent on research and development goes into drugs for conditions that plague the Third World. As one pharmacist put it: "Pharmaceutical companies are more interested in helping bald fat men who struggle to get a hard-on than they are in helping people with malaria. It's just not where the money is."

Only one percent of all new medicines brought to the market by multinational drug companies between 1975 and 1997 were designed specifically to treat preventable tropical diseases — 13 out of 1 223.

Malaria kills at least a million people a year and infects nearly 500 million. But while 40 percent of the world is at risk of malaria, nine out of 10 cases occur in Sub-Saharan Africa.

In Ndumo, health officials are excited about the protocol as it will mean the integration of previously isolated malaria control areas. Williams says: "The road to Maputo was previously a dead end to a war zone. Now it's an area of enormous potential."

*'In the days of DDT, people often used to lock their homes for the day and leave before we got there'*

**SLEEPING EASIER: Thabisile Tembe, 16, and Dumsile Masimula, 4, under an insecticide-dipped bed net, shown to lower the incidence of malaria by 16 percent in Ndumo, and, top left, fumigators outside a hut they have sprayed in the district** Pictures: JACKIE CLAUSEN

# Malaria: north should buzz off and let south use cost-effective DDT

## Chemical is not a human carcinogen and it works, writes **Richard Tren**

(89)
BD 20
10/99


THREE Nobel laureates in medicine have started a debate by signing a controversial letter calling for continued global use of DDT, the pesticide so vilified by environmentalists the world over.

At stake are the lives and well-being of millions of people mostly in poor countries, at risk from malaria.

This week delegates at a United Nations Environment Programme (Unep) conference may vote to ban DDT and 11 other persistent organic pollutants. If they succeed, DDT could be banned internationally by the year 2007.

While there could be valid reasons for banning many of the persistent organic pollutants, there are very compelling reasons for not banning DDT.

Malaria is carried by mosquitoes. The most cost-effective method of controlling malaria is to control mosquitoes by spraying the walls on which they rest with DDT, a chemical which is toxic to these insects but not to humans.

The use of DDT has ensured that SA's malarial areas are now one-fifth the size they were before the Second World War. The disease, however, has been on the rise in SA and throughout the region. This is partly because of a reduction in DDT use, as well as higher rainfall in recent years and increased migration of people between SA and other highly malarial countries such as Mozambique.

There has been a 500% increase in malaria cases in SA in recent years. Malaria kills about 2,7-million people worldwide and leaves another 500-million chronically ill every year.

DDT is recognised by nearly all scientists and researchers involved with malaria to be the most effective pesticide in malaria control.

Donald Roberts of the Uniformed University of Health Sciences in the US has studied the relationship between malaria and DDT use and found a strong negative relationship: the more DDT is used, the lower are malaria rates.

In South America he showed that all malarial countries experienced sharply rising rates of malaria once they reduced DDT use. Ecuador, which increased its use of DDT, experienced a 60% decline in malaria cases. Bolivia, Paraguay and Peru, on the other hand, stopped DDT spraying altogether in 1993 and subsequently saw new cases rise by more than 90%.

In 1962 Rachel Carson published her book, Silent Spring, and launched the attack against DDT, which resulted in its banning for agricultural use in the 1970s.

Many of the studies against DDT were, however, scientifically flawed and have subsequently been refuted. DDT, for example, is not a human carcinogen. Bird species actually rose during the period that DDT was used in the US

In any event, no one is proposing that DDT be widely sprayed over agricultural fields and wetlands, as it was in the past, but that it is allowed to be sprayed in limited quantities inside dwellings. The amount of DDT that a US cotton farmer would have used on a 100-acre crop in 1968 is enough to protect every high-risk house in Guyana for a year or more.

Apart from being a humanitarian disaster, malaria imposes enormous economic costs, mostly on the world's poorest nations.

A recent study I just completed for the UK-based Institute of Economic Affairs (www.iea.org.uk/env/malaria.htm) estimates that the annual costs of malaria (made up of the cost of treatment and lost productivity through illness) in selected southern African countries exceeds $1bn, or 4% of their combined gross domestic product.

Given the human and economic cost of malaria, it is understandable that many countries are keen to continue their use of DDT

Unfortunately though, DDT is now difficult to get hold of and countries that would prefer to use it in malaria control, such as Botswana and Tanzania, are forced to use more expensive alternatives.

Zimbabwe has come under pressure from, among others, tobacco farmers to cut back on DDT use. This is because exports might be affected if developed countries find any trace of DDT on tobacco. The fact that tobacco contains numerous carcinogens and that DDT has been proven not to be a carcinogen seems to have been conveniently forgotten.

Northern countries are increasingly using environmental standards as trade barriers against the south. As a result, in this case, millions of lives are directly being put at risk.

The Malaria Foundation International, which is made up of more than 350 physicians, including the medical laureates mentioned above and malariologists, published an open letter (www.malaria.org/ddt.htm) to the Unep delegates urging them not to ban DDT until an affordable alternative is available.

The alternatives now available — synthetic pyrethroids — are significantly more expensive than DDT and more complicated to administer and monitor.

The World Wide Fund for Nature says that the banning of DDT will concentrate minds in order to find a cost-effective alternative by 2007. This seems like an unbelievably flippant attitude to the lives of the millions that are at risk from malaria.

The World Health Organisation previously supported the use of DDT in vector control. However, its new high-profile malaria initiative, Roll Back Malaria, does not even mention house spraying and prefers to promote the development of new drugs and a vaccine.

Efforts to develop a vaccine and new drugs are woefully underfunded. In addition, because profits in fighting malaria are limited, private sector research is minimal when compared with research into fighting other diseases. Even if a successful vaccine is found in the short term it is likely to be unaffordable to most developing nations.

The DDT debate neatly illustrates how the environmental ideals of so-called civilised countries are pursued at the expense of developing nations that have little or no say.

One can only hope that the recent report that two 11-year-old Boy Scouts in Long Island, New York, contracted malaria at a scouting camp will bring home to the north the cost that malaria imposes on the south.

The banning of DDT must not go ahead and environmentalists must be stopped from putting their sensibilities ahead of the lives of people in malarial countries.

□ *Tren is an SA-based environmental economist and research fellow at the London-based Institute of Economic Affairs.*

MALARIA

# THE TOTAL ONSLAUGHT GETS UNDER WAY (89) fm 22/10/99

## Regional co-operation provides hope for tourism and investment

In an historic first for the region, the governments of SA, Swaziland and Mozambique are co-operating in a R40m joint offensive to wipe out malaria.

In addition to the inter-governmental malaria protocol signed last week, a conservation area agreement and protocol has also been finalised, laying the foundation for the creation of cross-border nature reserves and major resort developments that straddle the three countries.

They include investment opportunities for major resort developments at Ponta do Oura on the Mozambican border and Kosi Bay in northern KwaZulu-Natal as well as game parks, joining the Ndumu Game Reserve and Tembe Elephant Park in northern KwaZulu-Natal, with the Futhi corridor in Mozambique, and one combining Swaziland's Hlane Royal National Park with the Mlawula Nature Sanctuary in Mozambique

Other tri-national projects allow for improved border management and access control, regional destination and investment marketing, and a harmonised approach to terrestrial and marine resource management.

This regional co-operation stems from the Lubombo Spatial Development Initiative (LSDI), an inter-governmental programme launched a year ago to unblock the impediments to the development of northern KwaZulu-Natal, southern Mozambique and eastern Swaziland.

This beautiful subtropical region, which is bounded by the St Lucia wetlands in the east and Swaziland's Lubombo mountains in the west, is marked by poverty and neglect and ravaged by one of Africa's biggest killers — malaria. Until this scourge is beaten, investors and tourists will continue to shy away

SA is is in the midst of the worst malaria outbreak since the Eighties. Malaria is usually a seasonal phenomenon that peaks after the summer rains, but in September there were almost 2 000 cases reported at the Ndumu clinic, compared to only 74 last September. This is even higher than the 1 496 cases reported by the clinic in the peak month of March this year.

Scientists at the SA National Malaria Research Programme blame the upsurge on the warm winter, multidrug resistance, and an influx of people from Mozambique, where there are no control measures, who are carrying the disease. Surveys of the uncontrolled malaria areas of Mozambique indicate that 40%-70% of people are infected and random border checks reveal that six out of every ten Mozambicans entering SA are infected.

Scientists have been calling for a regional approach to malaria control for the past six years, arguing that controlling the disease in Mozambique will reduce its incidence in the high-risk border areas of SA and Swaziland, and thus in these countries as a whole.

"Since we've become a democracy in SA it's enabled us to start moving forward on projects like this," says National Malaria Research Programme leader Brian Sharp "Historically, health has been viewed from a country-specific and not a regional perspective. The initiation and success of such a joint control initiative offers a unique opportunity to demonstrate the value of such a regional approach to donors and governments in other parts of the continent."

The Mozal aluminium smelter near Maputo is contributing R2,8m to the malaria-control project after experiencing 3 500 cases of malaria among its 9 000 workers and six deaths over the past 18 months. The SA Business Trust is donating R4,6m, with the remainder coming from the three countries and SA's Medical Research Council.

The project will be spearheaded by a Regional Malaria Control Commission, which pulls together experienced scientists, public health officials and malaria-control programme managers from the three countries

Already up and running, the commission aims to reduce the incidence of malaria infection from 400 people to fewer than 20 in 1 000 people in southern Mozambique and from 250 people to fewer than five in 1 000 people in the high-risk parts of SA and Swaziland

It aims to achieve this by expanding the control measures that have worked in SA since the Fifties The main thrust will be to spray the inside of houses with a pesticide that kills mosquitoes on contact. The introduction of mosquito nets is also being investigated

The programme will also beef up primary health-care services so that more malaria cases are identified and treated. It includes a five-year regional study into malarial drug resistance to determine which drug combinations are most effective against the disease, with the aim of standardising treatment methods in the region

Scientists and health officials are confident that these main measures will reduce malaria in the region, but there is an untested theory that may bedevil the operation — a possible correlation between malaria and Aids. The latest malaria figures are so startling that scientists are beginning to give this some consideration. Their fears are fuelled by a recent Kenyan study that found a link between malaria and the Aids virus in pregnant women.

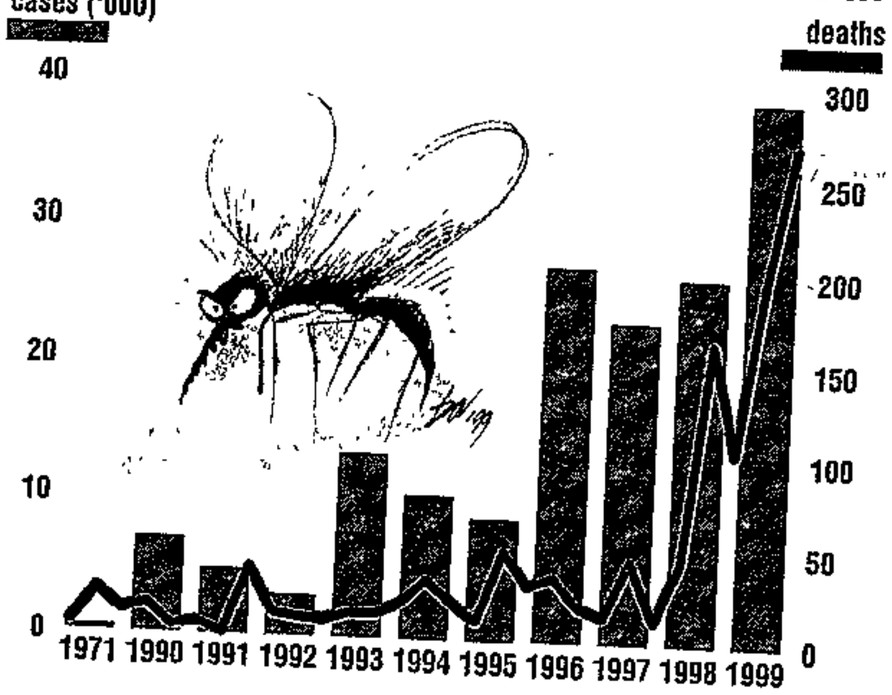
"There is absolutely no evidence (of such a link) apart from the circumstantial, but based on the Kenyan study it really behoves us to look at it," says Sharp.

This aside, the project is a positive step for the region and given the commitment and expertise of all involved, should be a resounding success.

Claire Bisseker

**CAN THE TIDE TURN?**

**Annual number of notified malaria cases and deaths in SA**




SOURCE: DEPARTMENT OF HEALTH (SEPT 10, 1999)

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*Director-general of the griculture.*

Matthys Mos

# Impotence outstrips malaria in profitability stakes

**David Pilling** of the Financial Times says tropical disease cures are dying of market failure

(89) BD 10/11/99

IF A 19th-century doctor emerged from a time capsule today, he would be bewildered by the pharmacological arsenal his successors wield against heart disease, cancer and mental illness. But show him the drugs to treat tropical illnesses and most would be perfectly familiar.

That is because the pharmaceutical industry has concentrated the great bulk of its research on combating diseases in the affluent developed world. Even though diseases of the developing world, such as malaria, tuberculosis and sleeping sickness — together estimated to kill 6-million people each year — are widespread, those afflicted often cannot afford to pay.

Paradoxically, as science has advanced, the problem has become worse: the cost of research has escalated — to between $300m and $500m for each new drug, according to the industry — rendering the meagre markets of the south even less attractive.

In short, it is more profitable to help an obese American shed a few pounds or an ageing European maintain an erection than it is to save an African from tuberculosis.

That is why, of the 1 233 drugs licensed worldwide between 1975 and 1997, only 13 were for tropical diseases, says Patrice Trouiller, a consultant to Médecins sans Frontières, whose advocacy of better access to drugs helped win it the Nobel Peace Prize last month.

Of those 13, two were slight modifications of existing medicines, two were produced for the US military and five were the outcome of veterinary research. That means drug companies, which last year spent a total of $40bn on research, have in two decades come up with only four medicines for tropical disease.

"Pharmaceutical companies have simply abandoned research on diseases of poverty," says Amir Attaran of the Centre for Study of Responsive Law in Washington

The industry disputes this, saying that many drugs, such as antibiotics, are equally relevant for the developing world. It argues that even when existing drugs are made available at cost, many developing countries simply do not have the medical infrastructure to use them. And if pharmaceuticals are misused they can quickly become ineffective through resistance.

Pharmaceutical companies are not charities. It would be suicide, they say, to invest 10 years and $500m on a drug for which there is no market. Such explanations do not satisfy everyone. "We can't accept a situation where a doctor tells you: 'I'm sorry. You're dying from market failure'," says Ellen 't Hoen, a drug policy consultant.

> 'We've got to find ways of creating that market'

So what can be done? One approach, says Robert Ridley of the World Health Organisation (WHO), is to strengthen the "push" and "pull" factors that help a drug on its tortuous journey from bright idea to packaged pill.

One way of pushing harder would be to extend "orphan drug" legislation, which exists in the US and Japan, to global diseases where market incentives are inadequate. In the US, the government offers market exclusivity, tax credits, development grants and fast-track approval to encourage companies to invest in rare diseases

While those incentives have worked well for western diseases, they have done little to stimulate research into tropical diseases In the past decade a paltry 3% of projects designated for orphan treatment have been for diseases prevalent in the developing world.

Many believe more could be done. Tax breaks could be increased and incentives provided to conduct research and testing — far more cheaply — in the developing world. Requirements to register drugs, subject to years of safety testing, could also be eased.

Yet no amount of pushing is going to work unless there is also pull. "The key issue is lack of a market, and we've got to find ways of creating that market," says Harvey Bale, president of the International Federation of Pharmaceutical Manufacturers' Associations.

One idea gaining favour in the WHO and World Bank is for the public sector to guarantee a market by making contingency money available.

Jeffrey Sachs of Harvard University has proposed dangling the prospect of an annual $250m as a prize for any company that comes up with a malaria vaccine.

Another initiative is the Medicines for Malaria Venture, a public-private partnership to be formally launched soon under the umbrella of the WHO. The idea is to create a "virtual company" in which, for example, public sector scientists can get access to the vast libraries of chemicals owned by multinationals.

By tapping into existing infrastructure, the idea is to produce new drugs at marginal cost Ridley estimates that $30m would be enough to fund the initiative's aim of registering one new antimalarial drug every five years

James Orbinski, international president of Médecins sans Frontières, says that, although such initiatives have merit, they are "tinkering on the margins" of a human catastrophe. "To leave this solely in the hands of the private sector and market forces means the situation will only get worse."

His proposed solution is an "indigent drug act" which would fund public-private research efforts, as well as the purchase of drugs, through a tax on pharmaceutical sales. Only through compulsion, he believes, can the fault in the market be remedied It is not an idea likely to find favour with industry. "If you tax companies, they'll just walk away from this issue," says Bale.

Yet there is one plan gaining favour with the WHO that might just win industry backing That would be to offer companies an extension of their patents on big-selling western drugs. Such patent extensions, potentially worth hundreds of millions of dollars, would be granted to companies investing heavily in tropical diseases. In effect, western patients would be subsidising the development of drugs for poor countries.

It is an idea fraught with political and operational complexities. Yet if substantial inroads are to be made into tropical diseases, many say it may be the best proposal.

# Worrying diabetic figures released

(99)

**Sowetan Reporter**

AT LEAST two-million South Africans have been diagnosed as diabetics, while an equal number are believed to suffer from the disease.

The South African Diabetes Association released these statistics yesterday to coincide with Diabetes Awareness Week, which began on Monday. The association said between eight and 10 percent of all South African blacks had been diagnosed as diabetics, while four to five percent of whites and 13 percent of Indians suffered from the condition.

Chairman of the association's Soweto branch Mr Lebogang Kgaye said yesterday the intention was to present an awareness programme tomorrow.

Experts would be on hand to explain how to care for sufferers. Sowetan 12/11/99

Working with staff at several Soweto clinics, the association had trained a number of volunteers to test blood for sugar. "If the blood of the person shows a high sugar content, the person is advised to see a doctor or visit a clinic," Kgaye said.

World Diabetes Day is on Sunday and its theme is: "Prevention means intervention now."

For more information Kgaye can be contacted on (011) 984-6535.

# Stocks of anti-malaria drugs run low

(89) M+G 10-16/12/99

**Paul Kirk**

As South Africa braces itself for a malaria epidemic, health experts are warning that a run on anti-malaria drugs may leave people defenceless against the killer disease

It emerged this week that pharmacies across the country are reporting fast-shrinking supplies of over the counter anti-malaria drugs, with several outlets in malaria hot spots having already depleted their stocks

The annual incidence of malaria in South Africa stayed below 12 000 until 1997, when it began to climb. In three of the last four years, the number of malaria cases has exceeded 25 000.

This year the incidence of the disease has soared. In the first nine months of 1999 the National Department of Health recorded more than 12 000 cases of malaria, including outbreaks in areas that have been malaria free for years.

Last year at least 10 cases of malaria were reported in Gauteng. This year the figure is expected to skyrocket.

Not surprisingly anti-malaria drugs are selling like hot cakes and are running low — a situation that could coincide with the first real epidemic of the new millennium.

Dr Andrew Jamieson of British Airways Travel Clinics says: "The situation is not good when it comes to anti-malaria medications. Chemists are hamstrung.

"The two most widely recommended and by far most effective drugs they can give out without a prescription are mefliun [equivalent to Larium] and doxicyclene. Many pharmacies have run out of them or are experiencing shortages. The result of this is that, unless the patient has a prescription, they cannot be supplied with malaria prophylaxis."

The possibility of those living in non-malarial areas being infected on a large scale is enough to give health workers nightmares.

"Mosquitoes are not born with malaria. They pass it on after biting an infected person. If a person from, say, Cape Town becomes infected with malaria as he could not obtain prophylaxis, then he may very well take the malaria to Cape Town and start an epidemic there. It is not a pleasant thought."

Jamieson says parts of Gauteng, especially the north of Pretoria, recorded malaria incidents last year, and it would be a "fair prediction" that the area would suffer more severe outbreaks this year. Nine out of the 15 pharmacies contacted at random by the *Mail & Guardian* say they have run out of over-the-counter malaria prophylaxis.

Jamieson says he has also received a number of reports of rural clinics running out of intravenous quinine — the most effective treatment for malaria.

"If travellers are going into malarial areas they should get hold of malaria prophylaxis well in advance of their departure," he says. "Many of the small clinics and hospitals will run out of medicines to treat malaria once it is contracted."

Because of South Africa's porous borders many clinics in border areas treat foreigners who come into South Africa in search of medical attention, straining state resources even further. While quinine is favoured by private medical practitioners, Fansidar, a relatively new drug combining sulfadoxine and pyrimethamine, is the preferred first line treatment used by governments in the fight against malaria.

**'If a person from Cape Town becomes infected as he could not obtain prophylaxis, then he may well take the malaria to Cape Town and start an epidemic there'**

Three Fansidar pills are usually enough to cure the disease and the symptoms disappear in a day or two.

However despite emergency supplies of the drug organised by the Department of Health, there's no certainty there will be enough of it.

Workers at some rural KwaZulu-Natal clinics told the *M&G* that they are experiencing long waits for supplies of Fansidar and doubt they will have enough to see them through summer — the peak malaria period.

Dave McGlew, representative for the KwaZulu-Natal Department of Health, says: "The best option would be for us to stockpile the drugs. The problem is we cannot afford to.

"The other problem is that malaria has been increasing at such a rate we cannot reliably estimate how much we will need of any particular medicine."

And while provincial health departments can barely afford the necessary medicines to combat malaria, they also have to spend a good deal of their anti-malaria budget on education.

"A big part of our problem with malaria can be laid at the feet of previous governments," says McGlew.

"In the past, tourists were amply warned about the dangers of malaria and given proper medical care. The locals living in malaria zones were simply ignored. If they got malaria they were given medication, but were seldom educated that they have to finish the course.

"As a result many people did not take enough medicine to kill the malaria — and enough to allow it to develop an immunity to the common drugs used to fight it."

McGlew's department is now having to embark on a massive education programme. "If we don't do this the malaria will become immune to the medication and all efforts will be for naught."

# False remedy fools consumers

**Paul Kirk**

South Africans are increasingly using flaxseed oil capsules as an anti-malarial remedy amid false claims that scientists have vetted the drugs.

The capsules have already proved popular in Johannesburg, and are now catching on fast in KwaZulu-Natal.

But experts warned this week that the leaflets accompanying the drugs are "blatantly untrue" and are misleading buyers about the product.

The brochure accompanying the capsules boasts about research conducted by Dr Orville Levander and Arber Agnew of the United States Department of Agriculture. The blurb does not explain exactly what the doctors found. But one of the scientists involved makes it clear that the results of his work have little relevance to people.

"While it is true that we tested this material some years back for its anti-malarial properties," says Levander, a top scientist at the Beltsville Human Nutrition Research Centre in the US, "all of this work was done with mice and we did not do any human studies with it." His research was restricted to the use of very specific rodents, in conditions that cannot be extrapolated to humans.

"The [anti-malarial] properties of] flaxseed oil manifested itself fully only when the mice were also vitamin E-deficient ... The requirement for vitamin E deficiency to demonstrate the efficacy of the flaxseed oil, of course, imposes a severe limitation on the use of this material as far as people are concerned, since humans are rarely deficient in vitamin E and, if they are, they probably have health problems to worry about other than malaria."

The *M&G* has established that neither the KwaZulu-Natal Department of Health nor the national Department of Health have tested or approved flaxseed as a malaria preventative.

Dr Andrew Jamieson of British Airways Travel Clinics says: "This particular promotion is dangerous — not only does it appear to be blatantly untrue on a scientific basis, but it promotes the use of a substance utilising what appears to be fabricated evidence. Travellers are warned to be aware of this fairly unsophisticated confidence trick, and not to place the health of themselves and their families at risk. Malaria can be a killer, and innocent people will die unnecessarily if this deception is allowed to continue."