Success of insecticide spraying in controlling malaria

To the Editor: I would like to bring to your attention the reduction in malaria incidence in northern KwaZulu-Natal during the past 2 years, which appears to have been achieved primarily by effective insecticide house-spraying.

Despite heavy rain in November 2000 (236 mm at Ingwavuma town), the malaria incidence dropped in December 2000, at a time when it usually increases, and has since continued to decline sharply.

DDT had been phased out in favour of pyrethroid insecticide in 1995 and 1996. However, after the discovery of pyrethroid-resistant, but DDT-sensitive, *Anopheles funestus* mosquitoes by K Hargreaves from the Malaria Control Programme at Jozini,[1] DDT was reintroduced during 2000 for house-spraying in northern KwaZulu-Natal.

Insecticide house-spraying in southern Mocambique started in November 2000, as part of the Lubombo Spatial Development Initiative.

The introduction in mid-January 2001 of Coartem tablets (Novartis) (20 mg artemether and 120 mg lumefantrine)[2] to treat malaria has probably further helped to reduce malaria incidence. The previous regime of sulfadoxine/pyrimethamine was demonstrated to be ineffective,[3] whereas Coartem appears to be effective.[4]

By way of example, figures for malaria incidence since 1995 from Ndumo Clinic, Ingwavuma District, northern KwaZulu-Natal, are set out in Table I.

The loss of malaria control between the years 1996 and 2000 demonstrates the need for constant activity against the mosquito and a vigilant watch for the emergence of insecticide-resistant strains.

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Recurrent meningitis due to unrecognised skull fracture

To the Editor: I read with interest the recent 'Forum' article entitled 'Recurrent meningitis due to unrecognised skull fracture'.[1] As the author points out, the association between head injury which results in a tear of the dura in relation to a shared bony wall between the skull base and a paranasal sinus, and subsequent non-meningococcal meningitis, is well known. That this injury may be occult and that meningitis can develop many years after the head injury cannot be overemphasised.

In 1993 Professor V J Farrell and myself published findings on a series of 30 patients[2] admitted with non-meningococcal meningitis and investigated by us using direct coronal computed tomography (CT) scanning. A fracture involving a

Table I. Patients testing positive each month for falciparum malaria at Ndumo Clinic, Ingwavuma District, KwaZulu-Natal, 1995 - 2002

	1995	1996	1997	1998	1999	2000	2001	2002
January	51	226	257	538	748	3 397	598	199
February	26	951	136	362	968	4 203	396	147
March	38	1 543	587	326	1 496	7 007	473	67
April	83	755	467	463	1 470	3 683	394	134
May	137	431	255	297	1 760	3 062	1 156	97
June	37	156	102	113	1 309	2 057	144	10
July	44	56	29	112	997	1 241	104	8
August	13	19	14	56	1 673	1 200	89	2
September	10	47	39	74	1 944	1 607	67	7
October	72	71	177	118	1 163	1 563	55	16
November	91	102	189	181	1 274	1 270	49	24
December	35	253	645	332	2 618	595	110	22
Year total	637	4 610	2 897	2 972	17 420	30 885	3 635	733

paranasal sinus adjacent to the floor of the anterior or middle cranial fossa (shared bony wall fracture) was demonstrated in every case. Of the 30 patients, 2 refused surgery. In the other 28 patients surgical exploration was performed and the site of the fracture corresponded to a site of dural tear in every case. The image published in Dr Ouma's article is similar to a number of the images obtained in our series. The longest interval from the time of head injury to presentation with non-meningococcal meningitis in our series was 13 years. Our article was one of the first publications to document the value of direct coronal CT scanning in this setting.

In light of the current HIV / AIDS epidemic, patients with opportunistic intracranial infection would have to be excluded; otherwise it is my belief that every patient who presents with non-meningococcal meningitis should be investigated for a possible shared bony wall fracture by undergoing a direct coronal CT scan of the floor of the anterior and middle cranial fossae.

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Need and opportunities for training health professionals in medical genetics

To the Editor: Medical genetics is a subspecialty registrable with the Health Professions Council of South Africa (HPCSA). Subspecialty training in medical genetics can be undertaken in academic centres registered with the HPCSA.

Medical genetics has played an increasing role in health care over the last half century and the need for medical genetic services in many developing countries including South Africa has become apparent in the last decade. Serious birth defects and genetic disorders comprise a wide-ranging and complex group of conditions affecting 50 - 80 per 1 000 children in this country and they contribute significantly to infant mortality and morbidity. The role of genetics in medicine is set to increase as the impact of the Human Genome Project and future developments are brought to bear on the care and prevention of the chronic common disorders of later life such as cancer, hypertension, stroke, asthma and mental disorders.

Currently, South Africa boasts 13 registrable clinical geneticists and fewer genetic counsellors. These personnel are far too few to bring a reasonable service to the population of this country. Currently, three departments of human genetics in South Africa, at the Universities of Cape Town, Free State and the Witwatersrand, are registered with the HPCSAto provide sub-specialty training for clinicians in medical genetics. Unfortunately, because of financial constraints and competing priorities, posts available to undertake such training are limited.

The Department of Human Genetics of the National Health Laboratory Service (NHLS) (Central), based in Johannesburg, has academic links to the Faculty of Health Sciences, University of the Witwatersrand, and offers a 2-year training post in the subspecialty of Medical Genetics for a specialist already registered in Paediatrics, Obstetrics and Gynaecology or Internal Medicine. The Colleges of Medicine of South Africa examine appropriately trained persons for registration and a Masters degree (Medicine) can be obtained concurrently through the Faculty of Health Sciences at the University of the Witwatersrand.

The Foundation for Alcohol Related Research (FARR) is offering a bursary commensurate with the salary earned by a specialist in public service to a selected person for training in Medical Genetics. The position becomes available on 1 January 2003.

A 2-year training in Genetic Counselling (Masters in Medicine) is also available for successful applicants commencing 1 January 2003. This is a comprehensive course similar to training schedules in the USA, Australia and Europe, and is registrable in South Africa with the HPCSA. Scholarships from the NHLS and the University of the Witwatersrand are offered to successful applicants.

Applications for these fields of training can be made to: Professor Denis Viljoen, National Health Laboratory Service, PO Box 1038, Johannesburg, 2000. Tel: 011-489 9211, Fax: 011-489 9226, Email: **denis@mail.saimr.wits.ac.za**

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Two mutations in the MTHFR gene associated with mild hyperhomocysteinaemia

To the Editor: We read with much interest the article by Scholtz *et al.*[1] on the interethnic differences in frequencies of the C677T and A1298C mutations of the methylene tetrahydrofolate reductase (MTHFR) gene. The importance of their findings