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