# **Readers' Forum**

## Against homoeopathy

Sir - Poitevin suggests ways of integrating homoeopathy into health systems (1). However, it is important to note that homoeopathy is not only unproven in clinical trials but has no scientific basis whatsoever. Indeed, its tenets run counter to fundamental scientific logic.

Homoeopathy is based on two beliefs.

- Substances that produce particular symptoms can be used to treat diseases displaying the same symptoms.
- The more thoroughly these substances are diluted, the more powerful is their clinical effectiveness. The method is claimed to work even if successive dilution reduces the concentration to a level at which it is statistically unlikely that even a single molecule of the original substance remains.

Given the incredible nature of these beliefs, there can be no reason to provide public funding for homoeopathy, regardless of whether the funds are for research, education or clinical application. Poitevin supports the promotion of homoeopathy with the claims that homoeopathy has "low costs" and that its "prescriptions are safe". However, any medical practice that is entirely devoid of rational basis is worthless, regardless of cost; while a prescription may be safe, safety means nothing if it is also functionless.

Any moves to integrate homoeopathy into health systems should be strenuously resisted. Otherwise, scarce public funds will be squandered, patients will be at risk from ineffective treatment, and ultimately the position of effective (i.e., science-based and evidence-based) medicine will be undermined.

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## **Continuing medical education** in unstable malaria areas

Sir - Dürrheim et al. reported a case-fatality ratio of 0.7% during a malaria epidemic in the Lowveld region of Mpumalanga Province, South Africa, in 1996, and identified poor case management at health care facilities as a contributing factor (1). Soni & Gouws described a malaria case-fatality ratio of 11.1% at a tertiary referral teaching hospital near another unstable malaria area in South Africa (2) and alerted clinicians to the importance of recognizing the life-threatening symptoms and signs of malaria for which urgent and special treatment is required. Professor David Warrell, one of the world's foremost authorities on malaria, has been quoted as saying "malaria is still largely unfamiliar to doctors", referring not only to British doctors practising far outside normally malarious areas but to South Africans as well, who may be expected to encounter the condition far more commonly (3).

It is encouraging to note that staff in the area studied by Dürrheim (1) acknowledged their shortcomings and have been retrained in the management of malaria at health care facilities, and that medical officers have accepted the responsibility of checking for errors in prescribing, monitoring and administering medication.

Where malaria occurs seasonally, erratically, or occasionally in epidemics in unstable malaria areas, knowledge of the disease — even among medical staff — may also be erratic and shallow, waning rapidly during malaria off-seasons. There is no sustained, in-depth clinical knowledge among medical staff, since they tend to encounter the disease far less commonly than they treat other endemic diseases. Scanty clinical knowledge could be a significant factor contributing to malaria deaths in areas of unstable transmission.

I therefore suggest that hospital-based continuing medical education be integrated into malaria control programmes, since a single episode of retraining after an epidemic may not be sufficient to sustain an adequate level of clinical knowledge for malaria case management in subsequent seasons. Such a scheme would involve malaria control programme managers in the prediction of malaria outbreaks, by remote sensing or other means, regular communication with hospital superintendents and community

medical officers, and meetings on clinical aspects of malaria management. They would also participate in the regular assessment of malaria management at hospitals, health centres and clinics. It is hoped that such an approach would help to avoid malaria deaths at health care facilities in unstable malaria areas.

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# **Need for trauma care** programmes in developing countries

*Sir* – Accidents and injuries are rapidly emerging as leading causes of morbidity and mortality in south-east Asia, where 25% of the world's population are gathered on 5% of its surface area. The number of urban dwellers in the region increased from 229 million in 1980 to 389 million in 1995, and it is expected to reach 460 million by 2000. Increasing urbanization and use of technology without a comparable increase in safety precautions and workplace protection make the developing countries of south-east Asia particularly vulnerable to accidents, injuries and man-made disasters, while the threat from natural disasters continues.

The developing countries of south-east Asia account for almost half the global burden of injuries: India alone lost 26.7 million disability-adjusted life years (DALYs) and China lost 33.6 million DALYs, according to a 1993 report (1). In India, it is estimated that 11 people will be injured or killed every minute by 2001 (2). Health care systems in the region are insufficiently prepared to manage incidents of trauma, accidents and mass casualties, because the essential infrastructure is lacking.

The key issue is therefore to define the problem and its magnitude, in order to plan effective management.

The Government of India is taking concerted measures to combat major communicable and noncommunicable diseases. In this regard it has implemented national programmes to reduce morbidity and mortality from these causes, to improve the quality of life of those affected, and to reinforce the delivery of primary, secondary and tertiary health care. In view of the large numbers of cases of trauma today, and that it affects mainly young people and those in the productive age group — with consequent economic implications — there is an urgent need to develop similar programmes in trauma care.

A "minimum trauma care system" should clearly spell out the facilities available, in terms of human resources and equipment, to ensure a minimum level of preparedness for an emergency response. It is important to strengthen national preparedness capabilities through capacity building at the national level and by ensuring maximum congruence between emergency relief, rehabilitation, and long-term development efforts. Irrespective of the cause of trauma and the nature of the injuries sustained, the mainstay of immediate treatment is basic life support and resuscitation. The lack of specialized equipment and operators continues to be a major weakness in the existing trauma care system, yet the need to ensure survival before other interventions cannot be overemphasized.

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# Effectiveness of mass vaccination with WC/rBS cholera vaccine during an epidemic in Adjumani district, Uganda

**Sir** – Further to the mass cholera vaccination campaign in refugee camps in Adjumani district, Northern Region, Uganda, reported in the last issue of the *Bulletin* (1), we describe below the situation when a cholera outbreak occurred in the district one year after the campaign.

Adjumani district has offered asylum to Sudanese refugees since 1989. The refugee population, which represents about 55% of the total district population (125 000 people), is spread over 35 different settlement camps. At the request of WHO, a pilot vaccination campaign with the WC/rBS oral cholera vaccine was conducted in October 1997 in six of these camps. The objective was to assess the feasibility and acceptability of mass vaccination in a large refugee setting (2). Vaccine coverage was 87.0%, a total of 27 607 persons being fully vaccinated.

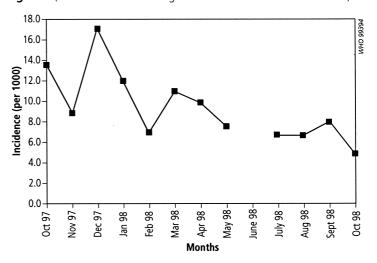
A cholera epidemic caused by *Vibrio cholerae* El Tor serotype Ogawa reached the north of Uganda in April 1998. In Adjumani district the first cases of cholera were reported in August, and the epidemic peaked in October 1998. Between 17 August and 8 November, 358 cases of cholera were reported from 60 different locations covering the entire district. The overall attack rate was 0.3% and the case-fatality ratio was 4.2% (15 deaths). The epidemic affected the entire district, and all the refugees, including those living in the vaccinated camps, were exposed to the risk of cholera. A total of 28 cases

out of 358 (7.8%) occurred among refugees, but none of them came from a settlement that participated in the vaccination campaign in 1997. Attack rates were higher in the Ugandan population than in the refugee population (0.59% v 0.04%, relative risk: 14.4 (95% confidence interval, 9.8–21.2)). Water supplies and sanitation facilities were similar in the vaccinated and non-vaccinated settlements, but were better in the settlements than in the Ugandan villages. This fact might partly explain the lower attack rate observed in the refugee population.

Since no case of cholera was reported from the vaccinated population, it was not possible to measure vaccine effectiveness using classic epidemiological studies (3). Therefore, in order to assess whether the cholera vaccination had had a protective effect, we compared the global incidences of common (non-bloody) diarrhoea between vaccinated and non-vaccinated refugee settlements for the month of October 1998. We also compiled the evolution of common diarrhoea incidences in four vaccinated settlements over the period October 1997 (vaccination) to October 1998 (outbreak).

The median incidences of common diarrhoea in October 1998 were lower in the vaccinated settlements (2.8/1000) compared with non-vaccinated settlements (10.0/1000) and the Ugandan population (4.3/1000) attending the same health units, but the differences were not statistically significant. The trends in the common diarrhoea incidences since October 1997 in four vaccinated camps did not show any marked increase during the cholera epidemic period (Fig. 1).

Fig. 1. Incidence of common diarrhoea in four vaccinated settlements, October 1997–October 1998, Adjumani district, Uganda (Note: Data were missing for three settlements for June 1998)



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Although it was not possible to measure the field effectiveness of the WC/rBS cholera vaccine during this epidemic, the evidence presented below points to its protective effect.

- Vaccinated settlements did not report any cholera cases, despite their proximity to non-vaccinated and affected settlements.
- The median incidence of common diarrhoea was lower in vaccinated settlements than in non-vaccinated settlements and among the Ugandan population attending the same health units during the epidemic period.
- The common diarrhoea incidence in the vaccinated settlements remained stable during the epidemic period.

This evidence suggests that WC/rBS vaccine can help in preventing diarrhoea in a refugee community exposed to the risk of cholera. These data, together with others, were reviewed by a group of experts convened by WHO in May 1999. The participants recognized that the oral WC/rBS vaccine was a potentially useful public health tool for some specific, carefully evaluated emergency situations and that cholera vaccine should be considered for preemptive use in high risk populations (4). Pilot mass vaccinations, which should now be encouraged in appropriate situations, would offer opportunities for further evaluating the feasibility and impact of cholera control strategies. However, factors that still prevent the public health use of this vaccine, such as insufficient supplies or uncertainties of price, should now be resolved.

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