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Improvements in childhood mortality in The Gambia

Sir—Olaf Müller and Michel Garenne's response (Feb 20, p 673)¹ to our report² rightly draws attention to the numerous factors that can be invoked to explain the substantial gains in child survival in sub-Saharan Africa since the 1950s.

Our report focused on The Gambia, however, since its percentage reduction of mortality among children younger than age 5 years from 1980 to 1995 was ranked first in all of sub-Saharan Africa. We used national census data from 1983 and 1993 and data from villages around Farafenni under continuous surveillance since 1981 in our study, and suggest that there is an additional reduction in child mortality that we believe is attributable to the effects of village-based health services. The figure in our report showed that the pace of mortality decline speeded up after primary health care was adopted. Villages with community health nurses, village health workers, and trained birth attendants had a faster mortality decline that did villages without such personnel.² Thus, we do not deny the major role of other factors, but we are able to point to a small additional benefit attributable to the provision of low-cost basic health services to a poor and uneducated population.

The increase in mortality among children younger than 5 years for 1994–96 is not evidence of a worsening trend—more recent figures bear this out. Given the small number of deaths, just 169 in villages with primary health care and 95 in the villages without these medical services for 1994–96, fluctuations between years are inevitable given the variability of rainfall and disease outbreaks from year to year. Note that there is also no evidence of a recent rise in mortality among infants and children aged 1–4 years in the neighbouring surveillance site at Niakhar (Senegal) during 1994–96.³

Finally, although chloroquine resistance was first detected in 1986^{4,5} and has increased steadily since then,

there are no signs of an increase in malaria mortality as judged from season of death and necropsy reports in Farafenni or the Bassé area (unpublished observations). Early treatment failures are still rare and sensitivity to chloroquine is still good, especially in rural areas (M Pinder, personal communication). The important point in our report stands—simple, locally available health services can make a difference to mortality and health.

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Perinatal information system (SIP): a clinical database in Latin America and the Caribbean

Sir—Nick Black's April 10 commentary¹ highlights the importance of high-quality clinical databases (HQCD) for clinical practice, research and audit, and for management and assessment of health services. Black remarks that "most [HQCD] have been regional rather than national" and justly deplures that despite their cost-effectiveness so few have been established. In addition to the major HQCDs in the UK and the USA referred to by Black, others exist in Europe and elsewhere.

I would like to mention the *Sistema Informático Perinatal* (SIP), which is the Pan American Health Organisation's (PAHO/WHO) large HQCD set up by the Latin American Centre for Perinatology (CLAP).² SIP is a continental HQCD that gathers individual clinical records of pregnant women in 20 countries in Latin

America and the Caribbean. This database is currently used for over 0.5 million births each year. Between 1985 and 1998, 1.3 million records were reported by 308 participating centres.

Ministries of health and maternity services (public and private) have adopted SIP. In brief, pregnant women are given a card, filled in during antenatal visits. The data are also recorded on the outpatient clinic file and on admission for delivery they are copied on the ward chart. All three forms (with the same layout) contain the information needed to manage a low-risk case and to discriminate between pregnancies that are low or high risk.³ A peculiarity of SIP is that the obstetric chart is at the same time the data-entry form: SIP software captures 170 variables entered by clinicians or under their supervision, and allows timely, accurate, and complete on-site statistics on perinatal care.

The number of records voluntarily sent to CLAP reached 100 000 for 1988. SIP software was redesigned in 1990 so as to make use of database technology. After a short decline in reporting of data, recorded cases reached 150 000 in 1991. In 1993–94 the installation of Windows transiently delayed data reporting. In 1998, information about 450 000 pregnancies was entered. As a result of its widespread use, the SIP dataset is now recognised as a standard. SIP is available at PAHO/WHO country offices in Spanish, Portuguese, or English and on the internet (<http://www.clap.hc.edu.uy>; accessed on June 3, 1999).

In its next step, internet-based SIP will soon offer clinicians, researchers, and managers worldwide, access to one of the largest perinatal clinical databases in the spirit of M Broca who stated in 1850 that "a good statistic is the best tool to decrease infant mortality".⁴

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