

In this month's *Bulletin*

Azithromycin beats tetracycline for mass trachoma treatment

Tetracycline ointment applied to the eyes daily for six weeks is the standard regimen for the treatment of active trachoma, the most common infectious cause of blindness. For mass treatment, however, it is not the most practical method: the ointment is not easy to apply, it blurs the patient's vision, and sustaining treatment daily over several weeks is difficult in rural areas. In a study conducted in eight villages of the Gambia, where 16% of the 1803 villagers had active trachoma, Fraser-Hurt et al. (pp. 632–640) compared the efficacy of topical tetracycline with another antibiotic, azithromycin, that lends itself to a more practical regimen for mass treatment — just three oral doses given weekly. Two months after treatment, the prevalence of trachoma had fallen to 4.6% in the azithromycin-treated villagers vs 5.1% in the tetracycline-treated villagers. At 12 months, it had climbed back to 16% in the tetracycline group but only to 7.7% in the azithromycin group. Azithromycin, the authors conclude, seems to be an effective alternative to tetracycline for mass treatment of trachoma. Their finding that it was able to sustain an overall reduction in the prevalence of active trachoma by 47% over 12 months suggests that it might prevent trachoma-related blindness.

Spreading the risks

In industrialized countries, relatively broad health insurance coverage is provided by linking it to employment — a mechanism not possible in much of the developing world, where people mostly work on a less formal or self-employed basis, and cannot contribute financially to medical insurance. Community-based insurance organizations, acting as “micro-insurance units” (MIUs), have in many places sprung up to fill the gap. But, as Dror points out (pp. 672–678), communities that provide health insurance often lack the financial resources and management skills to survive. One remedy being explored by a team, led by the author, of experts from the International Labour Organization, the World Bank, and the University of Lyon, in France, is a system of reinsurance — dubbed *social Re* — which pools risks too great for MIUs and provides them with the necessary expertise. The author outlines the results of an analysis of available data that point to some of the conditions such a system should fulfil to help MIUs achieve their social goals durably (see editorial, p. 587).

From fee to free

What happens when a government decides to provide health services free of charge to people who've been used to paying? In South Africa, the health authorities made the switch in two stages, starting in 1994 by removing fees for pregnant women and for children under six, and three years later doing away with all fees for services at primary health care clinics. To find out the impact of this change, Wilkinson et al. (pp. 665–671) studied attendance patterns from 1992 to 1998 at the ten clinics of a district (population over 200 000) in northern KwaZulu/Natal. The demand for curative services, which had increased dramatically in the first years after the first switch to free services, continued to increase — more slowly, but steadily — after the more extensive change in 1997. Demand for preventive services, such as childhood immunization, growth monitoring and antenatal care, which had

always been free of charge in South Africa, declined slightly over the seven-year period, but more steeply after the 1997 change. The moral of the story? Governments should “remain vigilant,” say the authors, as to how changes in health policy might be affecting overall health objectives.

Censuses as sound sources of maternal mortality data

Current methods for obtaining data on maternal mortality are often imprecise or not representative of a national population. A study undertaken by Stanton et al. (pp. 657–664) investigated to what extent a population census might be a useful alternative source of data. The study looked at censuses from five countries — Benin, the Islamic Republic of Iran, the Lao People's Democratic Republic, Madagascar, and Zimbabwe — that included appropriate questions. The researchers applied standard evaluation methods to calculate the degree of under-reporting for each census. They checked, for example, the quality of reporting of all deaths in the population by comparing the age distribution of reported deaths in the population to the age-distribution of the population itself. They also compared the proportion of all deaths in the population accounted for by maternal deaths with the expected distribution of that proportion across age-groups and the reported number of births with the number of under-five-year-old children in the population. The maternal mortality data from four of the five censuses had to be adjusted upwards by as much as a factor of three, the study found. The authors conclude that censuses incorporating carefully chosen questions and suitably evaluated and adjusted offer several advantages: they allow calculation, for the national population as a whole or broken down by age-group, geographic area, socio-economic status, and other variables, of the four important measures of maternal mortality — maternal mortality ratio (annual number of maternal deaths per 100 000 live births), maternal mortality rate (annual number of maternal deaths per 100 000 women of reproductive age), lifetime risk of maternal death, and proportion of adult deaths due to maternal causes.

Blood or saliva for antibody screening?

Surveys to determine the proportion of people with specific immunity against infections can provide useful information for setting immunization policy. Methods of measuring levels of antibodies specific for infections generally require blood samples. Measuring antibodies in oral fluid, which can be sampled by inserting a tiny sponge on a stick into a person's mouth, is clearly a far more user- and consumer-friendly technique than the more invasive blood sampling. But are the results as accurate under field conditions? To find out, Nokes et al. (pp. 588–595) measured levels of antibody specific for measles, rubella and hepatitis B in paired blood and oral fluid samples collected from 853 members of a rural Ethiopian community. For measles, the results showed a 96% concordance between oral fluid and blood sampling; for rubella, an 81% concordance (89% for under-20-year-old subjects); and for hepatitis B, a 61% concordance. The authors admit that improvements in the performance of the test methods are required, but believe that the results do suggest that oral fluid sampling has a high potential for replacement of blood in antibody prevalence surveys. ■