

Pakistan water project lowers risk of diarrhoea by 33% (pp. 160–165)

A four-year water and sanitation extension programme in selected villages of northern Pakistan combined engineering measures with education. In the fourth year of the programme, a case-control study of children aged up to six years found that children not living in programme villages had a 33% higher odds ratio for having diarrhoea. Factors taken into account were that boys had 25% lower odds of having diarrhoea than girls, and that the odds of diarrhoea go down by 2.6% for every year the mother is older, and 1.4% for every month the child is older. The engineering components of the programme included water supply, quality, drainage and sanitation. The education components included disease transmission, latrine use, hygiene, food safety, and operation and maintenance of water sources.

Syndrome-based management potentially effective for inpatient care (pp. 166–173)

Overburdened, under-resourced paediatric hospitals might benefit from syndrome-based inpatient case management. It can improve performance by helping to define a basic standard of care, rationalize treatment, and audit outcomes. Researchers came to this conclusion after comparing paediatrician-defined final diagnoses with hypothetical syndrome-based management in a Kenyan district hospital for a one-year admission cohort. They found that the 20 clinical features used for admission syndrome definitions in the Integrated Management of Childhood Illness protocol could be used, and that syndrome-based treatment would be greatly improved by microscopy of the cerebrospinal fluid, and haemoglobin measurements.

Self-help course for chronic disease patients works in Shanghai (pp. 174–182)

A chronic disease self-management programme improved the participants' health-related behaviour, autonomy and health status and reduced hospitalizations in comparison to a control group who did not take the course. A model used effectively in the US, Canada and the UK was introduced in Shanghai, with some modification for cultural differences (such as deleting references to "driving a new car", substituting

familiar Chinese exercises for Western ones, and changing references to death). Adults with hypertension, heart disease, arthritis, lung disease, diabetes, cancer and other conditions took the course, which was led by non-health professionals using a manual. The participants received a copy of the book *Living a healthy life with chronic conditions*. Savings in health care expenditure as a result of the course were calculated as nine times the cost of the intervention.

Volunteers in Bangladesh effective if well trained and supervised (pp. 183–189)

Research physicians working with 120 community health volunteers in rural Bangladesh concluded that this category of health worker can provide effective diagnosis and treatment of acute respiratory infections (ARIs) at the household level, but only where there is intensive training and close supervision. Most of the volunteers had had only five years of schooling. They diagnosed 221 (19%) of the children they examined as having ARIs, while the physicians diagnosed 263 (23%), indicating that they tend to underreport potential cases.

Praziquantel is the more effective schistomicide (pp. 190–196)

Praziquantel was significantly more effective than oxaminiquine in treating *Schistosoma mansoni* infection. In addition, the oogram (a rectal mucosa biopsy) was found to be significantly more effective than stool examinations in detecting *S. mansoni* eggs. The findings are from a randomized controlled trial at the Minas Gerais University Hospital in Brazil. A hundred and six patients infected with *S. mansoni* were allocated to three groups, one receiving praziquantel, one oxaminiquine, and one a placebo of starch. By stool examination, oxaminiquine had a cure rate of 90.3% and praziquantel of 100%, but by oogram, these figures were 42.4% and 96.1%, respectively. The authors recommend the use of the oogram for clinical trials, and further trials to determine optimal dosage and treatment schedules, and the resistance of *S. mansoni* to oxaminiquine.

Diarrhoea remains a principal cause of illness and death (pp. 197–204)

Diarrhoea still accounts for 1.6–2.5 million deaths of children under five years of age

annually. Each child in the developing countries experiences an average of three episodes of diarrhoea a year. Worldwide mortality rates in under-five-year-olds is estimated to have dropped from 159 per thousand live births in the 1950s to 70 per thousand live births in the 1990s. Between 19.5% and 21% of all deaths of children under five years old are thought to be caused by diarrhoea. Though overall morbidity rates in children have dropped, there has not been a concurrent decrease in morbidity attributable to diarrhoea. These conclusions are drawn from a structured review of literature since 1990 on morbidity and mortality rates featuring diarrhoea.

Malaria prophylaxis in children: many questions remain (pp. 205–216)

Malaria prevention in children by the use of drugs may be appropriate within integrated health programmes, where a suitable drug is available, delivery problems can be overcome, and the effect on immunity is containable. This approach can also be cost-effective. The conclusion is drawn from a review of 50 years of literature on malaria chemoprophylaxis. However, the place of prophylaxis in the armamentarium of malaria prevention is still not clear, though its benefits for pregnant women are well established. Further research is needed to evaluate its use by adolescent girls before pregnancy, and to measure the risk of drug resistance. In practice, many children receiving antimalarials for prophylaxis will already be parasitaemic, so that the therapeutic effect of the drug also has to be taken into account.

The Singapore Tuberculosis Elimination Programme aims to speed up progress (pp. 217–221)

Tuberculosis incidence in Singapore was between 49 and 56 per 100 000 during the 1990s. The country's TB elimination programme was launched in 1997, and by 2001 had brought the incidence down to 44 per 100 000. On the agenda for speeding up the progress: an outreach DOT programme for TB patients without easy access to a polyclinic; detention of infectious recalcitrant defaulters for treatment under the Infectious Diseases Act; molecular fingerprinting of TB isolates; and screening for TB in high-risk groups. ■