

Rubella vaccination pays (pp. 264–270)

Cost–benefit and cost-effectiveness studies in both developing and industrialized countries between 1970 and 2000 show that rubella vaccination is beneficial. Though rubella is typically a mild illness, the virus can cross the placental barrier and infect fetal tissue. The resulting congenital infection can cause fetal death or anomalies including congenital heart defects, deafness, cataracts and mental retardation, anomalies which are known collectively as congenital rubella syndrome (CRS). Rubella vaccine provides lifelong protection but adds to the cost of immunization, so this has to be weighed against the cost of a potential CRS epidemic. Though the overall data are already conclusive, further study is needed to determine the most appropriate way to introduce rubella vaccine.

Causes of infant mortality in rural Pakistan (pp. 271–276)

In some of the least-developed provinces of Pakistan the infant mortality rate was found to be 99.7 per 1000 live births. The three main clinical causes of infant deaths were diarrhoea syndrome, tetanus, and acute respiratory infections. These data, gathered from some 55 000 households, indicate that child survival programmes should place more emphasis on maternal tetanus immunization, safe delivery, and cord care.

Vaccination against viral hepatitis B (pp. 277–281)

A low-cost, low-dose plasma-derived hepatitis B vaccine was found to be effective in controlling endemic hepatitis B infection. A cross-sectional study of 18-month-old babies one year after they had been immunized against viral hepatitis B was carried out in rural districts of all nine provinces of South Africa. Protective titres of anti-hepatitis B antibodies were found in 669 (87%) of the 769 blood samples tested. Up to now, many countries have been unable to carry out extensive vaccination against hepatitis B because of the cost. Hepacine B, used in this study, appears to offer an affordable solution.

Nutritional wasting in developing countries (pp. 282–291)

Explanations for the prevalence of wasting in under-five-year-olds in Africa, Latin

America and Asia must differ across regions, but low birth weight is a predictor of wasting in all three. In Asia, disease burden, access to safe water, availability of health services, and child care practices were major factors. In Africa, low adult literacy rates and low birth weight are associated with prevalence of wasting. In Latin America low birth weight is the only ecological variable associated with it. Economic globalization and reductions in health and education budgets increase the need for improved measures of wasting and its causes.

Infant and toddler nutrition in rural Kenya (pp. 292–299)

In the Busia district of western Kenya breastfeeding is sustained till the latter part of the second year, often longer, but the diet is supplemented with gruel from the age of about three months. Based on cereal and cassava, the complementary diet appears to provide sufficient kilocalories a day, but for children receiving 500g or less of breast milk a day the diet is short of vitamins A, B₂, calcium, iron and zinc. Programmes to improve toddler nutrition should encourage breastfeeding in the second year but other interventions, such as the promotion of fortified food, are also needed.

Gender parity would reduce cataract blindness (pp. 300–303)

In developing countries there are more cataract cases in women than in men, but more cataract operations are performed on men than on women. A literature review finds that females account for 63% of all cataract cases but coverage with cataract surgery is 1.2–1.7 times higher for males. If women received surgery at the same rate as men, cataract blindness would be reduced by a median of 12.5%. At present, women bear two-thirds of the global burden of blindness, and much of this excess is probably due to cataract.

Deaths from rabies underreported (pp. 304–310)

Rabies mortality in the United Republic of Tanzania was estimated using data on incidence and distribution of dog bite injuries, the accuracy of rabies recognition, the levels of post-exposure treatment,

and published clinical data. Bites are more fully reported than other injuries because of fear of rabies. Bites on the head, face and neck carry a higher risk of rabies than, for example, on the foot and leg. The incidence of human rabies predicted on the basis of these and other active surveillance data on bite incidence was 4.9 deaths per 100 000 population — up to 100 times greater than that officially recorded.

Containment of wild poliovirus (pp. 311–316)

The prevention of inadvertent transmission of wild poliovirus from the laboratory to the community is a realistic goal. The main challenge is to prevent transmission through laboratory workers with unrecognized infection. Such transmission can only occur if materials carrying wild poliovirus are present in the laboratory concerned, if a laboratory operation exposes a worker to wild poliovirus, if a worker is susceptible to an infection that results in shedding poliovirus, and if the community is susceptible to poliovirus infections. It is hard to eliminate any of these conditions, but the first three can be greatly reduced.

When is obstetric care needed? (pp. 317–324)

Reducing maternal mortality entails measuring it, which has led to a search for appropriate indicators. Ideally, these should measure access to and use of the services most likely to reduce maternal mortality. The focus is thus on obstetric care, but measuring and interpreting the indicators for its need and use is far from being a straightforward procedure. More precise, clear-cut and well-defined indicators are needed for diagnostic categories of severe complications.

Private health services in low-income countries (pp. 325–330)

Private health services are popular because they are often cheaper and more convenient than the public services, but they can also be much less reliable, especially at the more informal end of the range of providers. There is a fair amount of information on what can influence providers beneficially, but less is known about the demand side, and how to strengthen the purchasing and regulatory roles of governments. ■