Reducing measles: The Kingdom’s

As part of the communicable disease surveillance system in Saudi Arabia, all medical facilities, both governmental and private, should report new measles cases through local health authorities to the Ministry of Health. For the purpose of surveillance, a clinical case of measles is defined as an illness with a generalized blotchy rash lasting three or more days with fever plus one or more of the following: cough, runny nose, red eyes and Koplik spots. These surveillance reports help to monitor the effect of the compulsory immunization policy that began in 1983.

In 1992, 11,229 measles cases were reported in Saudi Arabia. Incidence rates by region ranged from 15 per 100,000 in Najran to 197 per 100,000 in Hafar al-Batin (Figure 1). The proportion of cases in the 1-to-4-year-old age group declined from 28.4% in 1989 to 15% in 1992.

Since compulsory immunization began in 1983 and coverage exceeded 80%, incidence rates have declined more than sixfold (Figure 2). However, from 1989 to 1992 they did not continue the downward trend, ranging from 33 per 100,000 to 82 per 100,000. During these four years, measles cases steadily increased in the 5-to-14 and 15-to-44-year-old groups. They also showed a milder increase in the 1-to-4-year-old age group (Figure 3).

Editor’s note: The introduction of measles immunization has had a profound effect on the incidence and age distribution of the disease. The target for 1995 is an incidence of less than 40 per 100,000. The World Health Organization Expanded Program for Immunization (EPI) has made the following recommendations to countries participating in EPI:

1. By 1995, reduction by 95% of deaths due to measles and reduction by 90% of measles cases, compared with (Continued on next page)
Tuberculosis

(Continued from page 4)

Incidence of pulmonary TB in the Kingdom has steadily decreased from 1978 until 1992 at a rate of 15% annually, and the line graph resembles one of the TB incidence in developed countries in the beginning of this century. This decrease can be attributed to improved case finding, diagnostic tools and management, an active vaccination program, and improvement in the socioeconomic status of the population.

In 1993 the incidence increased by 4.8%, which can be attributed to heightened awareness of TB among health personnel, who received 11 intensive courses in TB case-finding and control in 1993. TB in the Kingdom comes from expatriates from high-prevalence countries; in addition to being a source of infection, they carry a multi-resistant tubercule, so all new arrivals in the Kingdom need to pass a screening test for TB (PPD test and chest X-ray) for issuance of a valid residency permit. The most productive population age group (15-44) has the highest infection rate in the Kingdom; this group also has the highest death rate in developing countries. The economic cost of TB in terms of lost production alone must be greater than that of a disease that exclusively affects children or the elderly.

References

Eradicating schistosomiasis

Both intestinal and urinary human schistosomiasis have been prevalent in Saudi Arabia. In 1971, a special unit for schistosomiasis was set up at the Ministry of Health (MOH) to carry out extensive regional surveys. This unit identified 12 foci of the disease (Figure 1). The prevalence rate of schistosomiasis ranged between 5% and 20%, and in some districts the prevalence reached 50%. In 1973-74, the MOH established seven regional Bilharzia centers to oversee operations of control programs.

Strategies of control programs were based on case-finding (using skin tests and stool and urine examination), treatment of cases with antischistosomal drugs, treatment of infested water bodies with mollusicides (niclosamide) and environmental modification. Initially antimonials were used for treatment, but they were replaced in 1982 with oral oxamquoinine and praziquantel; cure rates reached 95%.

In 1983-84, four new Bilharzia control units were established and the control program was extended to cover all endemic areas in the Kingdom. Intervention activities were strengthened. These included provision of safe water supply, mechanical weed control, removal of unnecessary water bodies by filling and drainage, health education and active community participation. In 1990, the control program was integrated within the primary health care program through primary health care centers.

In 1985, when the overall prevalence was 9.5%, about 80% of schoolchildren and inhabitants of infected districts were screened and diagnosed cases were treated. The prevalence of schistosomiasis dropped to less than 1% in 1993. After two decades of extensive effort, it seems that eradication of schistosomiasis in the Kingdom is feasible.

— Reported by Bilharzia Control Unit, Infectious and Parasitic Diseases Department, Ministry of Health

References