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Experience of a hepatitis A vaccination project for children of immigrant origin in the Netherlands

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Post-summer peaks in hepatitis A (HAV) incidence have been observed in the Netherlands related to children of Turkish and Moroccan immigrant parents after visiting their countries of origin (1). This increase in cases is reflected in regional outbreaks of HAV in primary schools and daycare centres for children (2). The phenomenon of small HAV outbreaks occurs every autumn, particularly in cities with a relatively large immigrant population (3). In the Dutch population – as in most other European populations – there is an absence of herd immunity to HAV. HAV transmission in the Netherlands appears to be limited to these seasonal peaks.

The Dutch incidence of notified cases of HAV has stabilised over the past three decades at around 4 to 7 reported cases per 100 000 inhabitants annually. Nevertheless, there has been a notable decrease in incidence in the last two years to 2.7 per 100 000 inhabitants in 2002 and 2.3 in 2003. Vaccination projects targeted at immigrants from Turkey and Morocco and their families may have played a role in this decline.

About 60% of the annual HAV cases in the Netherlands occur in children under 16 years of age, and particularly in the 5-9 year old group (1). A Dutch seroprevalence study showed that the prevalence of IgG anti-HAV increases from 2% in 5-7 year old children of Turkish origin to 22% in 14-16 year olds. In children of families of Moroccan origin, this increases from 10% in the youngest group to 58% in the oldest group. This is in contrast to Dutch children whose parents are of western European origin, where these figures were 0.3 and 3% respectively. This study suggests that the majority of children of Moroccan and Turkish origin aged 5-16 years are not protected against HAV, and may be at high risk of becoming infected while visiting their country of origin (4).

In the Netherlands, vaccination of children of families of immigrant origin beyond that of the normal programme is still not a national vaccination policy, due to cost-benefit and ethical issues. National health insurance does not cover HAV vaccination. Therefore, depending on the regional perception of the problem, and the availability of personnel and money, the 40 GGDs in the Netherlands are left to organise their own regional programmes. In about 25% of regions, a targeted hepatitis A vaccination program is offered via different schemes.

Children of families of immigrant origin often travel to the family's country of origin without proper infection control precautions, including active HAV vaccination. In the last few years, Dutch municipal health services (GGD) have organised different public health initiatives targeted at this risk group to encourage these children to be vaccinated against HAV, both to protect these individuals and reduce HAV transmission in the general community. Hepatitis A vaccination projects could be of interest to other European countries which have large populations of children of Turkish, Moroccan or other non-western European origin.

The GGDs of South Limburg have introduced such a project for 1-16 year olds in June each year (5). The total population of South Limburg is approximately 650 000, of which 3100 are of Turkish and 7200 of Moroccan origin. This immigrant population resides mainly in the three major cities of South Limburg. A non-discriminatory approach was used in which children of families of immigrant origin as well as children of native Dutch families could obtain a 'cheap' HAV vaccination for the price of €17 instead of €35 in June 2003. Parents only had to pay for the cost of the vaccine. The month of June was chosen as many people prepare for their summer holiday then. Local newspapers gave considerable attention to the vaccination campaign. The Turkish and Moroccan communities were approached through community outreach, and flyers were distributed in local mosques. Information was also distributed via a Turkish women's network.

Of a total of 800 children vaccinated during the campaign month, 124 (16%) of these were children of families of immigrant origin. 52% of all 800 children went on holiday to Turkey. Of the children who went to Turkey, 17% went to visit family members living there. The other half of the vaccinated children went mostly to countries such as Morocco, Egypt, Tunisia, Mexico, Brazil and Indonesia. Fifteen per cent of this group visited family in Morocco.

2003 was the second year this approach has been tried. In 2002, 530 of these vaccinations were given to children in June. Another 500 were vaccinated in the other months of that year. Besides the 800 vaccinations in the campaign month, another 700 children were vaccinated against HAV at the normal price during the rest of 2003. In 2004, we are planning to expand the campaign by adding a targeted promotion in 200 primary schools and a yellow information leaflet which will invite parents of nine year olds to have their children vaccinated against hepatitis A at the same time as the children are participating in the national child vaccination programme.

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The impact of this vaccination campaign on regional incidence is difficult to estimate, as the numbers are too low to detect fluctuations, and surveillance data is almost always an underestimate. However, a substantial number of children of immigrant origin were vaccinated during that one month.

It is hoped that the coverage of the total group at risk will increase if this project is repeated each year. In 2004, our goal will be to increase HAV awareness by disseminating information in all primary schools, and lowering perceived risks of the vaccine by connecting it to the national vaccination programme for 9 year olds.

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