

To the Editors:

## Measles, mumps, rubella (MMR) vaccine

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The Ministry of Health has announced that the Measles, mumps, rubella (MMR) vaccine will be introduced to our national immunisation programme from 1st October 2011. Its introduction, although belated by over 10 years, is most welcome. The vaccine against mumps was first introduced in 1968. Since then it has been available in the form of MMR (mumps, measles, rubella) and MR (measles, rubella) vaccines. In developed countries and in some developing countries MMR vaccine has been part of national immunization programmes for many decades.

Mumps is a highly contagious disease, widely prevalent in Sri Lanka. It has many potentially serious complications. Mumps is one of the commonest causes of aseptic meningitis, and the reported incidence of symptomatic cases is as high as 15%; asymptomatic pleocytosis in the CSF is found in 50% - 60% of cases. Mumps encephalitis without signs of meningitis is reported in 0.02% - 0.3% cases and deafness occurs in about 25% of such cases. Acquired sensorineural deafness caused by mumps is one of the leading causes of deafness in childhood, affecting approximately 5 in 100,000 mumps patients. Mumps orchitis and oophoritis occur in 20% - 50% of post pubertal males; it is rarely associated with permanently impaired fertility and seems to be a risk factor for testicular cancer. Acquisition of mumps during the first trimester of pregnancy is associated with a 25% incidence of spontaneous abortion. Pancreatitis is reported in about 4% of cases [1].

In 2000, the Ministry of Health conducted the first vaccine summit. One of the agenda items was the possibility of including mumps vaccine in the local EPI (Expanded programme of immunisation) schedule. Two options were discussed: the MMR vaccine and the MR vaccine. As there was a resurgence of measles in the 1990's, it was also decided to introduce a second dose of measles vaccine in the EPI schedule [2]. After a lengthy debate, the matter was put to the vote, and by a narrow margin, the MR vaccine was chosen over the MMR vaccine, and was included in the EPI in 2001. The main reason for preferring the MR vaccine over the MMR vaccine was

the cost difference of Rs. 40 million annually. Over the past decade the cost of MMR vaccine has gradually decreased because of the greater number of doses used globally, and Sri Lanka remained one of very few countries using the MR vaccine. At the second vaccine summit convened in 2007, it was decided to replace the MR vaccine with the MMR vaccine in our EPI schedule. Due to the adverse publicity following two deaths related to the rubella vaccine, its introduction was postponed. At the third vaccine summit held in September 2010 it was unanimously decided to include the MMR vaccine in the national immunization schedule from 2011.

All this time the MMR vaccine was available in the private sector for those who could pay for it. Only the poor children of this country were deprived of the MMR vaccine. Many children in Sri Lanka have nerve deafness due to mumps: in a study conducted in all ENT units in government hospitals in Sri Lanka between March 2003 and March 2004, 36 patients with nerve deafness due to mumps were identified, and all had profound sensorineural deafness [3]; local ENT surgeons see 6 to 9 cases of nerve deafness due to mumps per year (Yasawardena ADKSN, personal communication). The only intervention available for bilateral nerve deafness is a cochlear implant which costs Rs. 1.5 million to 3 million, a prohibitive cost for most of the affected. Those who opposed inclusion of the MMR vaccine in our EPI schedule at the first vaccine summit in 2000 should, therefore, bear responsibility for the occurrence at least some cases of nerve deafness secondary to mumps in our children during the last ten years.

### References

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