Letter to Editor

Hepatitis B in Bangladesh: Further Suggestions

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I read with great interest Rashid and Rafiq's article published in the spring issue of this journal[1]. The authors not only highlighted the shortcomings of the current hepatitis B vaccination strategy in Bangladesh but also prescribed a wonderful policy, which is felt to be both cost-effective and befitting with the country's existing programme on immunization. To complement this I would like to add few more points:

- Most neonates mount an immune response, which is believed to be adequate to reduce their risk of perinatal Hepatitis B Virus (HBV) acquisition after vaccination[2]. Though the pre-term babies (<37 weeks) show a slower response than the term (≥37 weeks) babies, immunogenicity, which is inversely proportional to the gestational age, can be improved by increasing the vaccine dosage [2,3].
- Timing first dose of hepatitis B vaccine with BCG probably has a positive interaction: administration of BCG at the time of HBV vaccine priming at birth markedly increases the cytokines as well as antibody responses to HBV vaccine[4]. This astonishing finding might suggest that BCG has a synergistic effect on hepatitis B vaccination. Bangladesh is reported to have a very high (94%) coverage of BCG vaccine[5]; the uptake of HBV vaccine can be equally improved by timing it with BCG.
- The present infant vaccination policy will leave adolescents unguarded and hence nationwide prevention of the disease will be delayed. A recent survey unveils that available infrastructure in Bangladesh has sufficient spare capacity to sustain storage of an increased quantity of vaccines[5]. To make good use of this unused legroom adolescent vaccination should be started along with infant vaccination. Countries such as Spain and Portugal have both neonatal and adolescent vaccination programmes in place, since 1993 and 2000 respectively, and these countries will be able to end the adolescent programme once the first immunised newborn cohort has reached the target age of the adolescent programme [6]. This has already happened in Italy; all persons born since 1979 have been targeted by either the infant or adolescent HBV vaccination programme in the space of 12 years [7]. Following these examples Bangladesh can implement both neonatal and adolescent vaccination programmes together in the beginning but can withdraw the adolescent programme after a decade or so when the current neonatal cohort will reach the age of puberty.
- The proposed strategy is applicable to other resource-poor countries that implement HBV vaccination policy similar to Bangladesh viz: India, Sri Lanka, Nepal, Pakistan and many more. Selecting the most appropriate HBV vaccination policy appears to be an ever-debatable issue; what we need before everything else is a global consensus on HBV vaccination strategy in the third world countries.

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