



Title Integration of Hepatitis B Vaccination in the National

Immunization Program in Denmark – An HTA Report

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Aim

To evaluate the consequences of introducing hepatitis B vaccinations in the child immunization program in Denmark, this health technology assessment:

- describes the present and future epidemiology of hepatitis B in Denmark, with and without the introduction of hepatitis B immunization
- describes the different hepatitis B vaccines, including the new combined vaccines where hepatitis B vaccine is included with other vaccines given to children
- describes the protective effectiveness of hepatitis B vaccine
- evaluates parents' knowledge about hepatitis B and their acceptance of hepatitis B immunization
- evaluates the consequences for the health sector of a hepatitis B immunization program
- evaluates the financial implications for the health service.

Conclusions and results

The advantages of introducing hepatitis B vaccinations as an element in the child immunization program are that the number of cases of acute hepatitis B from the present level of 120 cases annually would probably decrease to almost zero and that approximately 20 new reported cases of chronic hepatitis B would be avoided. However, the effect will only manifest itself in approximately 15 to 20 years. After many years (minimum 40 to 50), immunization will lead to fewer deaths (less than 10 per year) resulting from chronic liver disease. Other related benefits will appear the short term. In particular, children will not need to be vaccinated in daycare centers that include children with chronic hepatitis B. Similarly, patients with chronic hepatitis B will run a smaller risk of being stigmatized. The disadvantages of introducing hepatitis B vaccinations include the financial costs, although these might be completely avoided depending on whether immunization is introduced as a supplement to existing vaccines or whether it is introduced in the

form of new combined vaccines. There is also a possible risk associated with introducing an additional vaccine to the existing immunization program in terms of potentially lower up-take in the total child immunization program.

Recommendations

The working group concludes that an overall recommendation depends on the emphasis placed on the advantages and disadvantages respectively.

Methods

Literature review, structured telephone interviews with randomly chosen parents/families, organizational analysis, and health economic analyses including sensitivity analysis.