

Study on The Efficacy of Hepatitis B Immunization in children aged 9 to 60 months in samples from Baghdad

Kareem M. Lilo

Iraq

Background: Hepatitis B Virus (HBV) is one of the most common chronic viral infections. Universal immunization against HBV is considered to be the best way of prevention of HBV infection. This study was conducted for the first time among Iraqi children below five years of age to determine the level anti- HBs antibody after primary vaccination.

Objectives: This study aimed to evaluate the level of the adequacy of seroconversion when hepatitis B vaccine is given at 0, 1 and 6 months as per WHO schedule among children under five years of age in Baghdad, Iraq. **Methods:** A total 568 serum samples obtained from healthy children received three doses of recombinant Hepatitis B vaccine from Jan. to Nov. 2016, the serum samples were analyzed by VIDAS for the quantitative detection of anti-hepatitis B surface antigens.

Results: showed that (488) 86% children had protect anti-hepatitis B surface antigens (>10 IU/L) and (80) 14% children had inadequate levels of antibodies (< 10 IU/L), the geometric mean titers for anti-HBs were 208 IU/L with standard deviation 147 IU/L, the Karkh district had no significant differences in the mean titer of anti-HBs antibody, the female had high titers of HBs against vaccination as compared that of males (P -value 0.05).

Conclusion: The vaccination program has been proven efficacy in children under five years of age living in Baghdad, the results showed that anti-HBs antibody titer may decrease over time after vaccination, finally, along with prevention and control strategies, ongoing investigation and monitoring antibodies level against HBV in children and other ranges are recommended. **Keyword:** HBV, vaccine, Immune response.

Biography

Kareem Lilo has his expertise in evaluation of the vaccine efficacy that used in Expanded programmed of Immunization(EPI). I was previously responsible for vaccine, sera and Biosimilar medicine registration and Patch release committee launching the use of vaccines in the EPI of the Iraqi MOH , worked several years as a member on National Immunization technical advisory committee (NITAQE) which is responsible for the studying the recommendation and publications issued by the WHO and then preparing the necessary recommendations regarding health care reports , finally I worked as a visiting researcher with Dr, Diane E. Griffin in the John Hopkins school of public health for new measles vaccine development.

kareemlilo@yahoo.com

Abstract received : February12, 2025 | Abstract accepted : February14, 2025 | Abstract published : 29-04-2025