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# **Seroprevalence of hepatitis (A) antibodies (IgG) among children in dakahlia governate**

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Hepatitis A Virus (HAV) is transmitted via the orofecal route and has a global pattern of distribution. However, the true incidence of hepatitis A is often underestimated because of under-reporting as a result of its widely asymptomatic and milder forms of infection. Thus, the epidemiologic pattern of HAV in a given country is indicated primarily by its seroprevalence and secondarily by disease incidence. The epidemiology of HAV is highly correlated with age and level of hygiene. This is a cross sectional study that was performed on 240 child selected from pediatric outpatient clinic at Mit Ghamer General Hospital "Dakahlia". A non random sampling method was used to select those children who came to outpatient clinic for minor illness (not hepatic). The aim of the study is to determine the seroprevalence of HAV abs IgG among children in Dakahlia. After informed consent was obtained from their guardians. The studied group were subjected to :complete history taking as regard to age, sex and educational states of their parents. In addition to informations about social class , source of water supply , methods of sanitary waste disposal and history of infection or vaccination to HAV. The overall seropositivity of HAV ab IgG among our cases was 82.9%. The prevalence of HAV infection closely correlates with environmental sanitation and the prevailing socioeconomic and hygienic condition. Our study showed that the seropositivity of HAV ab increased significantly with decreasing social class from 19.1% among children in high class, 53.8% in middle class and 27.1% in low level. The educational level of parents was significantly correlated with HAVabs IgG reaching 19.1% in children with professional parents versus 79.6% in those with less educational . As regard to sex, our study showed no statistically significant difference between males and females seropositivity . So vaccination against HAV in Egypt should a priority for children at the preschool and school age period, especially in middle and lower social class. Conclusions The overall seroprevalence of anti-HAV abs IgG in our sample was 82.9%. As a large number of children are susceptible to subclinical infection of hepatitis A , a national vaccination programme may be of a priority now especially for middle and lower social class , because the level of anti -HAV abs prevalence was higher within the middle and lower class and significantly correlates to the educational level of the parents. Also the seropsitivity is high within age group (2-6) years which is the group that not catch infection early in life will be at risk for infection occurring later in adolescence or early adult life with more severe symptoms in the case of contact with HAV. Recommendations Vaccination against

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HAV in Egypt should be a priority for children of low and middle social class at the preschool period without pre-testing for HAV Ab. Well-planned population based epidemiologic studies in different areas of the country will allow formulation of cost effective strategies for the use of hepatitis A vaccine. Also, vaccination for children of high social class should be in consideration as they not catch infection early in life, will be at risk for infection occurring later in adolescent or early adult life with more severe symptoms. Vaccination for those who are at risk for transmission of infection as food handlers .