Editorial

The Shift of HAV Infection in to adulthood in Iran: Consideration for HAV Vaccination

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INTRODUCTION

In the recent years, hepatitis A virus (HAV), the main causative agent of acute viral hepatitis, has attracted the scientists' attention to itself. More than 212 million people are annually infected by HAV. This virus is classified in *Picornaviridae* family and *Hepatovirus* genus and is transmitted oral-fecal via contaminated food and water or direct contact with the infected people [1, 2].

The severity of HAV increases with age and can range from asymptomatic or a short lasting and mild illness to a severely disabling disease lasting several months. Children less than 6 years of age are commonly asymptomatic or present with mild disease without jaundice and represent an important source of infection. In older children and adults, HAV is typically symptomatic with the majority of individuals developing anorexia, nausea, fatigue, fever and jaundice, usually lasting less than two months. Older persons have an increased risk of progressing to fulminant hepatic failure resulting in death [2-4].

Hepatitis A disease is closely associated with economic and social conditions of the communities. Therefore, the highest incidence of hepatitis A is seen in Africa and the lowest incidence in the Northern Europe [2]. According to the seroepidemiological prevalence of HAV, Iran has been placed in the intermediate endemic region. Different reports from Iran show a range of HAV prevalence from 8% to 99%. The most effective ways to combat hepatitis A are proving safe water supplies, food safety, improved public health and the hepatitis A vaccine [5-8].

During the past three decades, two major changes have been made. The first is a gradual shift in the age of infection from early childhood to adulthood in many of the developing countries including Iran [9, 10]. This shift has been attributed mainly to improved socioeconomic status and sanitary conditions resulting in growing cohorts of susceptible young people and hence an increased risk of hepatitis A outbreaks. Second, the clinical picture of hepatitis A disease appears to be changing from asymptomatic or mild infection, which is the case in early childhood infection, to symptomatic infection with jaundice in adults [11]. The age-related HAV epidemiological shift in Iran results in an increased susceptibility of younger age groups and consequently draws attention to the importance of vaccination against HAV.

HAV vaccination is an effective method for preventing morbidity and mortality due to fulminant hepatitis. It also helps to decrease the spread of HAV in the community and subsequently prevent from HAV outbreaks [8]. There are two types of HAV vaccines, namely the inactivated and the attenuated. The attenuated HAV vaccines are usually used in China while the inactivated ones are widely used [1-3]. Therefore, it seems that adding HAV vaccination to expanded program of immunization (EPI) should be considered as a wisdom approach for HAV burden prevention in adulthood.

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