INTRODUCTION

Streptococcus pyogenes or group A streptococci (GAS) are bacterial pathogens that produce suppurative and non suppurative infections in humans. The suppurative infections include pharyngitis, pneumonia, meningitis pyoderma, erysipelas, cellulitis, necrotizing fasciitis, scarlet fever and sepsis, ***(Henriet et al., 2010***). Acute rheumatic fever (ARF) is a delayed non suppurative sequel to GAS pharyngitis and is a major cause of acquired heart disease in children particularly in developing countries ***(Kerdemelidis et al., 2010).*** Other important sequel are post streptococcal glomerulonephritis that may occur after skin or throat infection ***(Rodriguez – Iturbe and Musser, 2008).*** Also certain brain disorders such as pediatric autoimmune neuropsychatric disorders associated with streptococcal infection (PANDAS) ***(Murphy et al., 2010).***

Children are major reservoirs of GAS and are almost susceptible to suppurative and non suppurative complications. Streptococcal carriage has been defined as the recovery of group A streptococcus from the nasopharynx or oropharynx in the absence of any evidence of acute infection ***(Pichichero and Casey, 2003).*** The carriage rate of GAS in school children varies according to geographical location, age of child and the season ***(Dumre et al., 2009).***

The carriage rates are higher in rural areas compared to urban areas. In rural areas schools are governmental and classrooms are overcrowded. The people living are of low socioeconomic standard. ***Lioyd et al. in 2006*** reported a carriage rate of 8.4% in asymptomatic school children in Chennai. ***Dumre et al. in 2009*** reported carriage rate of 10.9% among Nepalese school children. Other studies have reported carrier rates between 2.5% to 14.3% in Turkey ***(Durmaz et al., 2003).***

Altindis et al. in 2001 showed that there is variation in the carriage rate of GAS in two different school children in Turkey. The carriage rate was 6% in students from school in improverished area and 28% in students from school in suburban areas.

Gunnarsson et al. (1997) reported low prevalence of GAS before age of 3 years and in adults above 16 years, but higher prevalence rate in the age group 3-15 years. Also the carriage rate differs in winter months than in summer months ***(Lioyd et al., 2006 – Danchin et al., 2007).***

Group A streptococci colonization of the upper respiratory tract of children play an important role in spread of infection in the household and in community settings such as schools, day care centres, and orphanges ***(Shet and Kaplan, 2004).*** When screened and properly treated with antibiotics, pharyngeal carriers can be prevented from spreading respiratory infections in the community. This in turn will reduce the incidence of life threatening post infectious sequelae. Data on the prevalence of healthy GAS carriers in the community may provide useful informations about the origin and spread of infectious agent ***(Lioyd et al., 2006).***