Introduction
1. INTRODUCTION

Viral hepatitis is defined as a diffuse necro-inflammatory liver disease caused by hepatotropic viruses. The basic morphologic patterns of acute or chronic hepatitis due to different hepatitis viruses are very similar irrespective of the virus causing the disease. The different types of hepatitis viruses are - Hepatitis A virus (HAV), Hepatitis B virus (HBV), Hepatitis C virus (HCV), Hepatitis D virus (HDV), Hepatitis E virus (HEV), Hepatitis G virus (HGV) and Transfusion Transmitted Virus (TTV) Viral hepatitis is the most common form of jaundice in pregnancy. Furthermore, in pregnancy hepatitis, the problem is not only to the mother but also pertains to the offspring resulting in premature labour, fetal loss and vertical transmission of illness to the new born with or without viral infection.

While enterically transmitted hepatitis (Hepatitis A and E) are more often seen in developing and underdeveloped countries, occurrence of Hepatitis B and C are often compounded with chronicity for the mother and risk of virus transmission to the child.

Hepatitis C virus (HCV) is a RNA virus that accounts for most cases of viral hepatitis in adults, and the recognition that it can be transmitted perinatally warrants particular attention by pediatricians.

Hepatitis C virus (HCV) infection is acquired through transfusion of infected blood, blood products or through routes not related to transfusion and classified as a community-acquired disease. Parenteral transmission of
HCV as a result of exposure to contaminated blood products and intravenous drug use (IVDU) is well documented (Alter et al., 1994). In developed countries, the predominant transmission route of hepatitis C is changing. In childhood, hepatitis C infection has been largely by transfusion. Since the implementation of blood product screening for HCV in 1991, the incidence of transfusional hepatitis C has dropped. On the other hand, the modes of non-parenteral transmission of this virus remain to be defined.

The frequent occurrence of perinatal transmission of hepatitis B virus (Stevens et al., 1975) suggests that perinatal transmission may be important for hepatitis C virus (HCV) also. Maternal and child health issues relating to HCV infection have recently assumed greater importance than ever before. The prevalence of hepatitis C among pregnant women and mother to child hepatitis C virus (HCV) transmission has been studied extensively in developed countries, and correlates of transmission have been largely discussed. These studies vary considerably in terms of the size of the study population, geographic variables and adequacy of laboratory testing.

In general, the prevalence of detectable antibody to HCV (anti-HCV) in pregnant women ranges from 0.1-2.4%, although in some endemic areas it is much higher. The majority of data are derived from Italian and Japanese studies. Rates of mother-to-infant transmission may differ in other parts of the world, because Japanese and Italian studies tend to have higher rates of mother-to-infant transmission compared with other studies.

Transmission of HCV to the infants might occur in utero, transplacentally at any time during pregnancy, during delivery or postnatally and the relative importance of each of these routes remains unclear. The risk
of infection acquired in this way is clinically more severe to the infants than
the infection with the same agent later in life. The economic burden of
progressive disease to the mother as well as the potential for maternal - fetal
transmission emphasizes the importance of preventive measures, early
identification and treatment of HCV.

Authenticated documentation on pregnancy hepatitis, maternal and
fetal outcome in pregnancy hepatitis, transmission pattern from mother to
child in symptomatic and asymptomatic viral infected mothers and impact of
preventive measures by vaccination are essential features to plan and
implement complete health measures in a country. Large studies of
unselected pregnant women in Europe, report relatively low HCV
seroprevalence (0.2%) when second or third generation ELISA's are used
with supplementary antibody tests (Manzini et al., 1995). Higher rates
(0.9%) have been reported using similar assays on smaller numbers of
pregnant women in the Middle East and sub – Saharan Africa, (Francois et
al., 1992; Hassan et al., 1993; Ndumbe et al., 1993) and rates may be
considerably higher among pregnant populations with parenteral risk factors
(Lam et al., 1993). Concern about the public health importance of HCV has
led to the debate about the desirability of introducing HCV screening for
antenatal or other populations. Antenatal screening for HBV has become
mandatory in India. However, antenatal screening for HCV is not routinely
conducted in India. Thus, in the absence of routine screening for HCV
infection among antenatal women in India and the existing possibility of
mother to child transmission of HCV, the present study was planned and
conducted to document such information among antenatal women and the
children born to them.