INTRODUCTION

The highest HCV prevalence in the world occurs in Egypt, where the prevalence of infection increases steadily with age, and high rates of infection are observed among persons in all age groups ***(Abd-elaziz et al., 2000)***.

Hepatitis C is usually slowly progressive over a period of many years. Five to 15% of patients with chronic hepatitis may progress to liver cirrhosis over 20 years.3 Four to nine percent of patients with cirrhosis will develop liver failure, and two to five per cent of patients with cirrhosis will develop primary hepatocellular carcinoma**(SCOTTISH 2005).**

Factors that have been reported to influence the rate of HCV disease progression include: age at infection (increasing age is associated with more progression), gender (males have more progressive disease than females), alcohol consumption, HIV co infection (associated with markedly increased rate of disease progression), iron deposition and fatty liver **(*Zignego et al., 2006)***.

Some recent studies have suggested that the cut-off between low and high viral load may be set too high. These studies have shown that people with a viral load under 400,000 IU/mL respond better to current medications compared to those who have a viral load above 400,000 IU/mL. More data is needed to confirm these observations**(Alan Franciscus,2011).**

AGE

Age s a contributing factor to treatment outcome. Generally, people under 40 years old respond better to current HCV treatments than people over 40 years old. This is due to a couple of reasons – the immune system of someone who is younger is more intact and better able to help with the task of fighting HCV. Also, the longer that one has hepatitis C, the more the virus can replicate and possibly cause damage to the liver, both of which are negative predictors to

treatment response. This is why some medical providers now believe that people should be treated early on – before any liver damage has a chance to occur(Alan Franciscus,2011).

the prevalence in those under age 20 is still approximately 5-8%, demonstrating the continued presence of significant hepatitis C transmission in modern-day Egypt **(Mohamed MK,2004).**

This pattern of moderate to severe chronic hepatitis is more common in older patients and in those with aggravating factors such as alcohol or immune deficiency ***(Yano et al., 1996)***.

Japanese elderly women were reported to be resistant to this therapy. Japanese patients are approximately 10 years older than those in other countries and our reports would provide useful information when considering therapy for elderly patients in other countries. The lower SVR rate in elderly women might be attributable to lower adherence to peg-IFN or RBV. However, few studies analyzed relationship between SVR rate and the adherence in elderly patients

(S. Watanabe, et al 2010)

Gender

In general, women seem to respond better to current HCV medications than men. The reason for this is unclear, but some experts believe that women (especially premenopausal women) can fight off the virus because of the positive effects of hormones**(Alan Franciscus,2011).**

Obesity and body mass index

Obesity is defined by certain measurements, such as BMI (body mass index), waist circumference and the measurement of actual body fat. Studies have found that people who are obese do not respond as well to HCV medications as those who are at a healthy weight**(Alan Franciscus,2011).**

Our study showed that, even though a BMI greater than 30 kg/m2 predicts the presence of hepatic steatosis, it is only the BMI that remains an independent risk factor for a poor sustained response to antiviral treatment. Furthermore, the presence of hepatic steatosis does not influence a patient's response to antiviral therapy when their BMI is taken into account

(Brian L et al 2003).

Until now, many host factors including younger age (40 years or less), female gender, lighter body weight, the absence of insulin resistance, elevated ALT levels , less advanced liver histology, and non-African American race are reported to be associated with favorable response. Recently the association of genetic variation of IL28B with response has been reported

(**H. S. Conjeevaram,2006**) .