

# Hepatitis In Primary Care: What Physician Assistants Can Do To Help Save Million Of Lives

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## Abstract

As millions of infected patients, friends and families commemorate May as hepatitis awareness month, we invite Physician Assistants to reflect on their role as frontline custodians for the health millions of people currently infected or likely to be infected by the seemingly silent epidemic of hepatitis C. Approximately 1 in 50 people in the general population are positive for HCV antibodies<sup>1</sup>, and about 1 in 20 patients seen in primary care may have acute or chronic hepatitis C<sup>2,3,4</sup>. How often do we screen patients with this debilitating chronic disease? For every diagnosis of hepatitis B or C missed, several others will be infected from the index case, many others will rapidly progress to liver disease, opportunities to start therapy early will be missed, thousands will need over \$200, 000 each year for liver transplant, the waiting time for liver transplant will increase beyond the current average of 300 days, and more will die from liver cancer every day<sup>3,4</sup>. Thus identifying these patients so that they may receive the optimum treatment and education is of paramount importance.

## BACKGROUND AND DISCUSSION

Viral hepatitis (A, B or C) combined affects 5 to 20% of our population<sup>1, 3,5</sup>. The consequences of hepatitis are significant. Although most cases of hepatitis A resolve spontaneously, each year a hundreds of patients (especially adults) develop liver failure from hepatitis A. For example, during the Chi-chi's outbreak of 2003 in Pennsylvania, over 601 hepatitis A infections were associated with the epidemic over a period of three weeks, of whom 124 were hospitalized, 1 required a liver transplantation and 3 died<sup>1,11</sup>. Hepatitis B infections usually resolve, especially when acquired in adulthood as is typical for the USA. However each year, 5% of adults develop chronic hepatitis B, and about half of these develop fulminant liver failure leading to death in the absence of liver transplantation<sup>1,2,3</sup>.

Furthermore, there remains the risk of vertical transmission from mother to infant particularly in those chronic carriers with active viral replication. Infants who have hepatitis B are more than 90% likely to become chronic carriers and as many as 1000 to 5000 cases per 100,000 person years (1-5% per year) risk developing hepatocellular carcinoma (HCC) and 25% will die of liver cancer or cirrhosis<sup>5</sup>. Both hepatitis A and B are vaccine preventable but hepatitis C is not. Hepatitis C, leads to chronic infection in about 85% of patients, with approximately 15-20% of patients developing

cirrhosis or HCC<sup>1,6</sup> and it is the leading cause of liver transplantation in the US. Together hepatitis B and C are the main causes of HCC, the 8<sup>th</sup> most common type of cancer in the US<sup>3,4,5,6</sup>. About 50% of those infected with hepatitis C are undiagnosed and only as few as 2-15% of those for whom treatment is indicated actually receive it<sup>3,4,5,6,7</sup>. Yet, with currently available therapy, over 40% of patients completing therapy may expect sustained virological clearance – essentially cure. In patients with HIV, it is liver disease not AIDS which is killing the majority of HIV/HCV or HIV/HBV co-infected patients<sup>1,8</sup>. Although less responsive than HIV negative patients, HIV co-infected patients too may achieve viral clearance with appropriate therapy.

Physician Assistants can help reduce the burden of hepatitis by adopting two basic principles;

a) During history taking screen patients: especially those with abnormal liver enzymes, a history of intravenous drug use, blood transfusion prior to 1992, prisoners, emigrants from Africa, Asia, or Eastern Europe, those with a history of sexual contact with high risk individuals or men who have sex with men. Initial screening should be with HAV total antibody, HBsAg, HBsAb, HBcAb and HCV antibody. For those electing to treat hepatitis C in primary care, an

example of a treatment protocol can be viewed at [http://www.hcvadvocate.org/hepatitis/About\\_Hepatitis\\_pdf/1.1.2\\_Training\\_Resources/PCP\\_GUIDELINES\\_final.pdf](http://www.hcvadvocate.org/hepatitis/About_Hepatitis_pdf/1.1.2_Training_Resources/PCP_GUIDELINES_final.pdf). It is appropriate to send to a specialist, any patient with evidence of liver injury or who is interested in being treated

b) Vaccinate those at risk for Hepatitis A or B especially those who already have chronic liver disease, hepatitis A or B negative individuals who are exposed to those in the high risk categories such as men who have sex with men or users of illegal drugs, persons traveling to or working in countries that have high or intermediate endemicity of hepatitis; health care/public safety workers; injection-drug users; persons with more than one sex partner during the previous 6 months; persons with a recently acquired sexually transmitted disease (STD); day care and sewage workers. In most states the Department of Health (DOH), Division of Immunizations, supplies vaccines for eligible persons to public health care providers including DOH State Health Centers, County and Municipal Health Departments (CMHD), Federally Qualified Health Centers (FQHC), Rural Health Clinics (RHC), and other DOH approved public provider sites. Patients should check with their local health center if they are eligible for Department of Health hepatitis A and B vaccines. Further, considering that about 75% of all HCV infected people will develop cirrhosis and 30% of those with Cirrhosis will end up having liver Cancer and that hepatitis C will rapidly progress to liver cancer if: patients drink Alcohol (>10g or about 2 glasses per day), have been infected for over 15 years or if infected while older, are male, are HIV positive or have other immunity disorders, Progressed significantly to cirrhosis on diagnosis or have elevated liver enzymes

It is recommended that HCV positive patients be advised not to drink alcohol, use acetaminophen, start new meds without speaking to physician, donate blood or semen, share razors or toothbrush, use IV drugs or share paraphernalia. But you should, consult your physician, get an HIV test, contact support group, get a doctor or health department and be vaccinated against Hepatitis A & B, maintain healthy weight, control diabetes mellitus, consider treatment and remember sex is okay in monogamous relationships.

To repeat the opening statement – patients with viral hepatitis may be infectious and a risk to others, at risk of

progressive liver disease themselves or candidates for therapy. Thus identifying these patients so that they may receive the optimum treatment and education is of paramount importance.

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