

Opinion





Hepatitis C virus in Egypt: is more than one challenge

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Hepatitis C virus (HCV) has great genetic variability, with 6 major genotypes (GTs); GT-1 to 6.1 In Egypt, HCV is almost exclusive GT-4 distribution.2 HCV has significant differences in their global distribution and prevalence.3 HCV is a worldwide infection, it is estimated that about 3.0%(170-200 million people) of the world's population are infected. HCV is associated with an increased disease burden due to liver cirrhosis and considerable mortality.4 More than 350,000 people dying each year from hepatitis C-related liver disease.2 Adding to the problem of HCV infection is the presence of occult HCV infection.5,6

Egypt has the highest prevalence worldwide^{7,8} it is estimated to be 14.7% among a representative sample of Egyptian population, aged 15-59year.⁹ Egypt is among countries responsible for 80.0% of global infections, further it is rank 4th.¹⁰ Further, prevalence is higher among hospitalized patients and special clinical populations.^{6,7}

In Egypt, HCV infection is a major, serious public health problem associated with increased morbidity and mortality. It can lead to the development of cirrhosis and hepatocellular carcinoma. Unparalleled level of exposure to this infection appears to reflect a national epidemic. It has been postulated that HCV epidemic has been caused by an extensive iatrogenic transmission during the era of parenteral antischistosomal therapy (PAT) mass treatment campaigns. Today, HCV infection and its complications are among the leading public health challenges in Egypt. Today

The most common HCV infection risk factors in Egypt are increasing age, a history of PAT, and residing in rural areas. ^{14,15} Other common risk factors were related to health care settings as history of blood transfusions, invasive procedures, injections, hemodialysis (HD), and dental work. ^{6,15–19} Community and informal health provider related exposures as circumcision, and cautery were also associated with HCV infection. ^{15,20}

Early (2001) in 20th century the Ministry of Health in Egypt initiated broad Infection Control Programs all over the country. ²¹ So, this year was considered as a cut-off year for controlling infections caused by all means of micro-organisms transmission at all health facilities in Egypt. ¹³

Different HCV studies conducted among diverse subgroups of general population, consistently report a very high HCV prevalence. Further, overall prevalence in rural areas averaged about 20.0%, higher than the national average. ¹³ El-Ahmady et al. ²² found 20.0%. Recently, El-Moselhy et al. ⁶ reported 61.3% prevalence of HCV infection among HD patients in Egypt. Also, among blood donors, a higher prevalence was observed among paid blood donors compared to voluntary donors. ^{22,23} Male blood donors and blood donors from rural areas had a higher prevalence than their female counterparts ²⁴ and than those from urban areas. ²⁵ Further, among acute viral hepatitis patients, HCV prevalence was 4.3% ²⁶ to 78.7%, ²⁷ with higher prevalence among those resident in rural areas compared to urban ones. Furthermore, the average HCV prevalence among schistosomiasis patients was about

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38%. Also, El-Sabah et al.²⁸ reported a prevalence of 84.0% among schistosomiasis patients treated with PAT 20 to 30years ago and a prevalence of 7.7% among those patients recently treated using oral method. In Egypt, a study was conducted among intravenous drug users revealed 63.0% prevalence of HCV.²⁹ High HCV prevalence was also observed among pregnant women and children in Egypt, a prevalence of ~8.0% in Benha³⁰ and 15.8% in rural villages of the Nile Delta.¹⁴

In Egypt treatment of HCV patients started since decades. The goal of HCV therapeutic is to achieve a sustained virological response.² In late 2015, HCV therapy with Sofosbuvir was launched in Egypt by Ministry of Health and the Egyptian National HCV Control Program. There are several challenges in combating HCV infection; drug regimen is expensive and cost, lose applied infection control, socioeconomic and demographic characters of the community are obstacles, and up to 200,000 patients are estimated to be infected each year. So, Egypt needs more support at the national and international levels. During her visit to Cairo, WHO director general Margret Chan recognized Egypt's efforts in the treatment of Hepatitis C.³¹ Two days ago, Messi (the famous football player) visited Egypt in February 21, 2017 to promote hepatitis C therapy.³² Lastly, new surveillance program should be applied for sustained prevention and control of HCV infection and its complications in Egypt.

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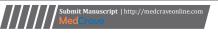
None.

Conflict of interest

Author declares that there is no conflict of interest.

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