Reviewer’s report

Title: Viral Transmission Risk Factors in an Egyptian Population with High Hepatitis C Prevalence

Version: 3
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Reviewer: Abdelouaheb Bennani

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HCV epidemiology is important, especially in Egypt. The PAT was the leading cause of this viral infection from 1950 through 1980s. What else after until recently? This paper seems to be important for this answer.

There are some relevant mistakes:

57 Conclusions: In Egypt, PAT and other transmission factors, through older (previous?) HCV positive older…

66 Chronic hepatitis C virus (HCV), a blood-borne pathogen, is a major cause of hepatocellular: “chronic” must be taken of.

72 In Egypt, the prevalence of the two major biomarkers of HCV - the HCV antibody (anti-HCV antibodies) and HCV RNA seropositivity - is estimated at 14.7% and 9.8%, respectively, in the…:

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75 25% for HCV RNA) [5]. The source of this epidemic has largely been attributed to the parenteral…

78 Iatrogenic sources have been considered as key contributors, especially among the elderly who…

112 collected ten milliliters of blood from participants for serological testing of HCV antibodies and 113 HCV RNA, as well as hepatitis B virus (HBV) core antibodies and HBV surface antigen, as

128 reverse transcription (RT)-PCR to test for HCV RNA [11]. Where there were discordant results

129 between the ELISA and RT-PCR tests, conventional PCR was used to retest for HCV RNA [10].

130 HCV positivity in this study was defined as anti-HCV and/or HCV RNA positive.

This section is totally confusing! And it should be revised because it is the origin of your results! You may also describe the tests used

ELISA tests are used for screening and RT-PCR is used to confirm the presence or absence of viral infection, so this viremia will discriminate between chronically infected (70-80%) and resolved infection (20-30%). You didn’t mention the reagents used for those tests.
142 Among the 1764 participants, the seroprevalence of anti-HCV and HCV RNA was 29.8% and
Use only prevalence because HCV RNA is not sero but molecular…
210 purposes; testing for HCV was assessed only among 15 to 59 years old individuals. Because the
Personally, I didn't find the exact answer to risk factors other than PAT in this paper the formation of a large reservoir of infection among the adult population, which explains the high prevalence of HCV and therefore the high risk of transmission. May be if there were also young patients in the study from new born from HCV positive mothers, we would have better understand the dynamic of HCV epidemiology.
Blood Transfusion was the main cause of HCV transmission before the introduction of anti HCV serology screening. Unsafe injection practices use is the leading cause both in IDUs and in low education and economic level countries.

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

I declare that I have no competing interests