

## Threats to Egypt's Plan to Eliminate Hepatitis C Virus Infection: Injection Drug Users and Sex Workers are Unaddressed Reservoir That Cannot Be Ignored; A Short Communication

Raouf Alebshehy

Egyptian Ministry of Health

Corresponding author: Raouf Alebshehy, [dr.ebsh@yahoo.com](mailto:dr.ebsh@yahoo.com), +21221253003

### ABSTRACT

**Background:** Hepatitis C virus (HCV) is a huge health problem in Egypt with 15% prevalence, 165,000 annual new cases, and 40,000 annual deaths. Egypt has developed a five years plan to eliminate HCV, however this plan does not fully address the problem of HCV among vulnerable groups such as injection drug users and sex workers. This article is to shed the light on this unaddressed reservoir that threatens the fully elimination of HCV in Egypt. It also provides an overview about proposed strategies to tackle HCV problem among that sensitive population.

**Key words:** hepatitis C, injection drug users, sex workers, peer health education

History of Hepatitis C virus (HCV) in Egypt dates back to the 60s, when unsterilized glass syringes were used to deliver Schistosomiasis medications through mass treatment campaigns leading to spread of infection among scores of Egyptians (1). Ironically, public health campaign has started HCV spread and health facilities are maintaining that role; 80% of new infections are occurring in health facilities as HCV's main mode of transmission is blood borne, therefore it transmits through blood transfusions and invasive procedures (2).

According to the World Health Organization (2), HCV is a highly infectious disease that annually infects about 165,000 individuals, and kills about 40,000 patients in Egypt. Its prevalence is 15% (3) and it is the main cause of cirrhosis (4), which leads to 9% of Egyptians' mortality (5).

Egypt's political leaders are supporting a five years plan to tackle viral hepatitis (6). The plan includes goals, objectives, and actions that cover six areas; surveillance, infection control, blood safety, vaccination, treatment, and educating providers and communities (7). Although the main cause of HCV infections in Egypt is health facilities, there are other causes of infection such as injection drug users (IDUs) and unprotected sex (8). However, Egypt's plan does not target sex workers except for hepatitis B vaccination, and does not target IDUs except in the objective of establishing a viral hepatitis serologic surveillance (8). Therefore, this article aims to

shed some light on the unaddressed reservoir of HCV among sex workers and IDUs, in addition to proposing possible strategies to tackle the problem.

The absence of interventions targeting high risk groups of having HCV such as IDUs, and sex workers is either due to the fact that 8 out of 10 new cases are infected in health facilities (2), consequently infection control tops list of priorities of the Egyptian Ministry of Health, or due to continuous denial among Egypt's conservative people about existence of IDUs, and sex workers. Therefore, it is a huge burden to any government to address these groups.

It is indeed a very sensitive issue to address this problem, however there are effective strategies recommended by international organizations that could be adapted, and implemented in Egypt's context such as reducing the incidence of HCV by raising awareness among IDUs about risks of same needle usage, and among sex workers about hazards of unprotected sex and the importance of using condoms (8).

Buying new syringes or condoms in Egypt is not difficult because private pharmacies are everywhere in Egypt selling these supplies. Therefore, the problem is not availability of syringes or condoms but it could be lack of knowledge among IDUs, and sex workers about their usage and importance. Therefore, this article suggests that health education interventions among these groups about the importance of following preventive measures such as using new syringes in case of IDUs,

and using condoms in case of sex workers could be of a high preventive value.

Moreover, the published literature provides relevant knowledge about various delivery strategies of health education among vulnerable groups in such sensitive circumstances. For example peer to peer health education (9) could be a very effective and feasible strategy that could tackle the problem with sparing both providers and receivers of health education, the consequences of stigmatization in a conservative country like Egypt. However, implementing such strategies requires a bold governmental support and the exemption of both providers, and receivers from the state of illegality when health education activities are being implemented.

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