

Hepatitis Awareness Bus: A Model for Finding Unknown Hepatitis B and C Infections

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Dear Editor,

Hepatitis C virus (HCV) has been recognized as a major cause of chronic liver disease since its discovery in 1989. The prevalence of HCV in the Iranian general population has been estimated to be less than 0.5%, equating 186,500 individuals (1). Alavian et al. indicated that new HCV treatments are available in Iran, providing an opportunity for HCV elimination (2). New treatments for HCV has brought good results. Therefore, the identification of infected people is very important. Most infected patients with HBV and HCV infections are not aware of their infections. Younus et al. revealed that awareness about HCV among infected patients was very low and there were lots of misconceptions among females and less educated people (3). Moreover, hepatitis B virus (HBV) infection has been observed in at least two billion people worldwide, and more than 360 million of them are infected chronically who are at risk of complications like death (4). The pooled prevalence of HBV was reported 2.2% in the Iranian provinces with the highest in Golestan 8.9% and lowest prevalence in Kermanshah 0.7% (5). In some eastern cities such as Birjand, the seroprevalence of Anti-Hbc was high due to the exposure of more reasons for getting tested (6). Roushan et al. showed that the adolescents' knowledge about HBV is lower than standard levels and infected people had low knowledge of transmission ways (7). The hepatitis virus as a major threat to the public health needed public awareness programs including campaigns to attract attention (8). Therefore, screening and identification of high-risk people play an important role in the treatment process. Viral hepatitis, especially hepatitis B and C, have been considered as silent killers for decades. However, the prevention and control of viral hepatitis infection was globally noticed in 2016. On July 28, policy makers, health workers, and the public gathered to realize the vision of eliminating viral hepatitis on world hepatitis day by 2030 (9).

According to the importance of identifying high risk people in Birjand city, the capital city of South Khorasan province, the hepatitis awareness bus started screening people during the national hepatitis week (22th to 28th Oc-

tober 2016) in collaboration with the department of health of Birjand University of Medical Sciences and Iran hepatitis network. Newspapers, radio interviews, television interviews were provided and pamphlets were distributed for announcement/advertisements. The bus stops in the pre-specified places to determine and refer high-risk individuals to get anti-HBc Ab and HCV-related blood tests, were free. They were stationed for five days, eight hours a day (morning and evening) and a general practitioner familiar with hepatitis, several medical students, and a trained nurse were in the bus. We hope that after visiting the bus to get explanations and brochures about the disease as well as exposure to relevant public media such as TV and radio advertising programs, the awareness would increase.

Tests were performed in the university laboratory, blood transfusion center, and two private laboratories across the city by immunoassays method. HBV and HCV were detected using immunoassays for HBsAg, hepatitis B core antibodies (anti-HBc), hepatitis C antibodies (anti-HCV). Participants were notified of their test results by referring to the lab. Appropriate information about the types of transmission, different reasons for being tested, and the prevention of hepatitis was given to participants in brochures. According to the number of reasons for getting tested which were self-reported by participants, anti-HCV or anti-HBc Ab tests were performed voluntarily after obtaining written informed consent free of charge. Participants referred to the relevant specialist for follow-up treatment.

In 341 participant, more prevalent reasons for being tested were bloodletting 122 (35.8%), complex surgery 112 (32.8%), simple surgery 108 (31.7%), and dental surgeries 78 (22.9%). Among 67 participants who were tested for anti-HBc Ab, 14 (20.9%) were positive and 53 (79.1%) were negative. Furthermore, among 213 participants who were tested for HCV, 2 (0.01%) were positive and 211 (99.0%) were negative.

The comprehensive study conducted on 5,236 people in Birjand showed that the prevalence of anti-HBc Ab and Hcv were 15% and 0.2%, respectively (6, 10). The eradication

of HCV will significantly need public funds for screening and prevention. The next steps include proper planning, development of HCV prevention strategies, and the availability of new treatments (11). This study showed that the temporary public informing periods and facilities such as hepatitis awareness bus could play an important role in the identification and treatment of high-risk people with hepatitis. Although doing similar activities seem to be not cost-effective!, hepatitis awareness bus is a preliminary model that could be revised in the future to screen people for high-risk behaviors and exposures first, then doing laboratory tests for people with high risks of being infected.

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