

Pilot Study for Determining Feasibility of Conducting HBV, HCV Entire Population Screening in Mongolia

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Introduction

Mongolia has the world's highest rate of liver cancer mortality—nearly eight times the global average. The prevalences of chronic viral hepatitis B (HBV), C (HCV), and D (HDV) in Mongolia are at an endemic level and constitute the main cause for Mongolia's world-leading liver cancer mortality rate. To eliminate HCV, to control HBV and HDV and to reduce liver cirrhosis and hepatocellular carcinoma mortalities significantly in Mongolia, it is critically important to identify every individual's viral hepatitis infection status. Knowing one's viral hepatitis infection status will enable taking appropriate actions, thus any action has to start with testing for viral hepatitis infection. Therefore, testing the entire Mongolian population for HBV and HCV and registering the viral hepatitis state of each and every Mongolian into a central database is the main goal of the Screening and Early Diagnosis Campaign of the Hepatitis Prevention, Control, and Elimination Program in Mongolia.

Purpose

To determine feasibility of screening each and every Mongolian for HBV and HCV infection and registering the viral hepatitis infection status of every individual into a central database.

Materials and Methods

In this pilot project, HBV and HCV screening campaign was launched through 40 primary (38) and secondary (2) public healthcare facilities in Ulaanbaatar as an early onset of the Hepatitis Screening and Early Diagnosis Campaign. Under this pilot project, 10,321 individuals were screened for HBsAg, anti-HCV using onsite, rapid test kits within 4 months.

Results

Out of 10,321 individuals screened within this pilot project, 1,325 or 12.8% were anti-HCV positive, while 793 or 7.6% were HBsAg positive. In total, there were 2,118 or 20.5% of all screened individuals had viral hepatitis infections. Irrespective of hepatitis infection status, every individual was registered into the Mongolian Electronic Health Records (MeHR) System.

Conclusion

With this pilot project, we demonstrated that it is certainly possible to screen every Mongolian for HBV, HCV infections utilizing the public healthcare infrastructure, registering infection status of individuals into an electronic registration system that would enable people with chronic infections to proper care. Based on this pilot project, we estimate that the entire Mongolian population screening can be completed within 2 years.