

# Study on Knowledge Awareness of HBV and HCV among Mongolian Population

*Oyungerel Lkhagva-Ochir<sup>1,2</sup>, Purevjargal Batulzii<sup>1,2</sup>, Delgerbat Boldbaatar<sup>1,2</sup>, Enkhbat Maralmaa<sup>1,2</sup>  
Ganbolor Jargalsaikhan<sup>1,2</sup>, Bekhbold Dashtseren<sup>1,2,3</sup>, Bayarmagnai Bold<sup>1,3</sup>, Naranjargal  
Dashdorj<sup>1,2</sup>, Naranbaatar Dashdorj<sup>1</sup>*

<sup>1</sup>Onom Foundation, <sup>2</sup>Liver Center, <sup>3</sup>Mongolian National University of Medical Sciences

## Background and aims

Mongolia has one of the highest prevalence of hepatitis B, C and D viruses - it is estimated that around 400 thousand people living with chronic viral hepatitis. However, most of the affected people are not aware of their infection status. Therefore, it is important to evaluate the knowledge and awareness of viral hepatitis among the Mongolian population. In this study, we evaluated the current understanding about transmission routes of hepatitis B and C viruses, as well as general awareness within the general population in Mongolia.

## Methods

Total of 2068 people including 1354 (65.45%) females from urban and rural areas were enrolled in this study. Age of study subjects ranged from 11 to 83 years old. Among the subjects 44.82% had higher education, 32.1% completed high school, 12.42% had specialized technical education, 13% had secondary education, 2.5% had primary education, and 0.33% had no education.

The study was approved by institutional research review board. Participation was voluntary, without compensation. Knowledge and awareness assessment questionnaire contained 14 different questions in addition to general background information. Data analysis was done using MS Excel and SPSS17.

## Results

Nearly 60% of study participants correctly identified that blood transfusion, needle injection, and medical procedures are major infection pathways for viral hepatitis. However, still around 32% of study subjects did not know these transmission routes, whereas small percentage ~3% of participants had incorrect information. Interestingly, 53.5% of participants did not know that HBV could transmit sexually, while 40.6% correctly responded to this question, indicating a big gap of knowledge and awareness. 11% and 44.1% of participants correctly responded that shaking hands or kissing do not put them in risk for hepatitis infection, whereas 51% and 47.1% of participants still did not know the answer. The study results also showed that knowledge and awareness of study subjects about viral hepatitis transmission is positively correlated with their education level ( $p < 0.005$ ).

## Conclusion

In certain areas, Mongolian public do have relatively good knowledge and awareness. This may stem from the fact that viral hepatitis is known for needle infection disease in Mongolia. On the contrary, sexual transmission of HBV is not well known among the Mongolian public. At the same time, 36% of Mongolian population is still not aware that viral hepatitis can lead to liver cirrhosis and cancer and that it can lead to death.