

## Abstract #9700

## Factors Associated with High Rates of HCV Infection Inho Chi Minh City, Vietnam

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## Abstract Text:

**Background:** With a population of 95 million, Vietnam has an estimated HCV prevalence of 3.3 to 4.7%. Ho Chi Minh City (HCMC) is the largest and the most diverse city in Vietnam. We conducted the first and largest population-based study of 5,000 people to determine prevalence and factors associated with HBV/HCV infection in HCMC. We hereby reported an interim analysis of HCV findings.

**Methods:** Between 06/2016-04.2018, using a probability proportional to size cluster sampling approach, 3,000 urban adults (aged  $\geq$  18) were invited to participate in free screening for HCV (anti-HCV Ab) and surveyed for demographic and risk factors (blood transfusion, tattooed, drug abuse, needle sharing, condom use, having at least a family with HBV or HCV), with \$5USD incentive. Persons with anti-HCV Ab(+) were referred to care with free HCV assessment labs, Fibroscan, and hepatology consultation. Distribution of sociodemographic and common risk factors associated with HCV infection were determined using unweighted descriptive analysis with  $\alpha$ =0.05.

**Results:** A total of 2,345 (78.2% of all invited) participated with median age 48 (IQR:22), ranging from 18-90 years old, 32% (753/2,345) were male. Of all, 3% (72/2345) had anti-HCV Ab (+) who also had higher rate of risk factors, lower income and lower education level compared to uninfected group. In both crude and adjusted associations (for all factors), age over 50 remained as twice as high among infected individuals (aOR 2.6, 95%CI 1.2-5.4). Other risk factors associated with infected status were needle sharing (aOR: 42.1, 95% CI 3.9–451.5), previous blood transfusion (aOR: 7.5, 95% CI 3.4–16. 8), male gender (aOR: 1.9, 95% CI 1.04–3.8). Interestingly, infected individuals reported more viral hepatitis checked (aOR: 4.25, 95% CI 1.7–10.8) but less health check within the past year (aOR: 0.46, 95% CI 0.23–0.93)

**Conclusion:** This study was well-received in community and revealed a high HCV sero-prevalence in general population of HCMC. In addition to known risk factors for HCV infection, the HCV Ab (+) individuals in HCMC were also associated with older age (>50 years old) and being male gender. Whether HCMC or Vietnam at large has a US like-"1945-1965 Birth Cohort" effect, characterized by a distinctively high prevalence of HCV, warrants further investigation.