

0777 - THE PREVALENCE AND CHARACTERISTICS OF PATIENTS WITH HEPATITIS B VIRUS (HBV) IN HO CHI MINH CITY (HCMC), VIETNAM - IMPLICATIONS FOR HBV ELIMINATION BY 2030

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Background

- Little information is available on HBV prevalence and Vietnam-specific characteristics of patients with chronic in Ho Chi Minh City (HCMC) or Vietnam
- We hereby reported HBV prevalence, serologic and epidemiologic characteristics and access to care factors for HBV in HCMC

Method

- Data from Probability Proportionate to Size sampling studies conducted in HCMC from 2016 – 2020.
- 19,400 representative adults (18+) were invited to free screening to identify HBV statuses and access to care
- Selected characteristics of participants were obtained: demographics, risk factors (blood transfusions, tattoo, drug abuse, needle sharing, condom use, at least a family member with HBV or HCV) and waist circumference (cut-off 90cm for men, 80cm for women)
- Written health education and care referral information were provided in combination with results. Follow-up information were obtained by phone 3-6 months after release of results.
- Multinomial logistic regression with backward selection were used to model the unweighted association of participants characteristics and HBV statuses (based on HBsAg, AntiHBs Ab, AntiHBcT Ab) at $\alpha = 0.05$

Results

- 97% of 15,094 respondents were screened and had complete data. 2/3 were women
- Median age 52 years old (IQR = 21), ranging from 18-94
- 58% had evidence of HBV exposure (AntiHBcT Ab+)

Screening for HBV

- HBV statuses includes:
 - ✓ 27% (3,951) HBV naïve (HBsAg -, AntiHBs Ab-, AntiHBcT Ab-):
 - ✓ 15% (2,194) Vaccinated (only AntiHBs Ab+)
 - ✓ 41% (6,065) Natural Immune (AntiHBs Ab+ and AntiHBc Ab+)
 - ✓ 7.6% (1,116) Infected (HBsAg+ and AntiHBcT Ab+)
 - ✓ 9.3% (1,365) Indeterminate (only AntiHBcT Ab+): 9.3%

As of June 2020

- The program contacted 83% infected patients (926) and 64% of them agreed to follow-up.
- Among those who followed-up:
 - 83.6% were insured
 - 94.9% received health education and care referral information
 - 59.5% got consultation from hepatologists

Adjusted* ORs (95%CI)	Vaccinated vs. HBV naïve	Natural immune vs. HBV naïve	Infected vs. HBV naïve	Undetermined vs. HBV naïve
Age				
Middle vs. young	1.43 (1.17, 1.76)	6.5 (5.11, 8.28)	2.15 (1.56, 2.96)	8.14 (4.60, 14.41)
Old vs. young	2.02 (1.58, 2.57)	13.53 (10.43, 17.55)	3.13 (2.20, 4.46)	23.34 (13.07, 41.70)
Gender				
Male vs Female	1.03 (0.88, 1.21)	1.58 (1.39, 1.79)	1.78 (1.47, 2.16)	1.91 (1.59, 2.29)
Ethnicity				
Kinh vs. Other	1.20 (0.93, 1.53)	1.43 (1.17, 1.73)	1.52 (1.08, 2.13)	1.46 (1.08, 1.97)
Education				
< HS vs. HS	0.80 (0.67, 0.96)	1.06 (0.92 – 1.22)	1.36 (1.07, 1.71)	1.52 (1.21 – 1.89)
>HS vs. HS	1.58 (1.29, 1.93)	0.97 (0.81, 1.17)	1.08 (0.80, 1.46)	0.96 (0.70, 1.31)
Condom				
Yes vs. No	1.12 (0.93, 1.34)	0.91 (0.77, 1.06)	0.73 (0.56, 0.96)	0.78 (0.59, 1.02)
Positive family member				
Yes vs. No	1.70 (1.39, 2.08)	1.48 (1.24, 1.76)	3.45 (2.75, 4.32)	1.10 (0.84, 1.46)

*After adjusted for age, gender, ethnicity, insurance status, central obesity, history of blood transfusion, tattoo, drug abuse, needle sharing, condom use, HBV positive in family member.

Conclusion

- HCMC, with a population of 12 million, has a prevalence of HBV (HBsAg+) of 7.8%
- Interventional programs are feasible and must be tailored to the local needs emphasizing navigation and use of insurance for services to reduce HBV burden in HCMC
- Males, less education, less socioeconomic status and more behavioral risks as well as metabolic syndrome characterized patients with chronic HBV in HCMC