

# PREVAC B

## Prevention of Hepatitis B among migrant people (final results)

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**GERVIH**

*AUBERT JP, CATRICE M,  
DI PUMPO A, GERVAIS A, SANTANA P,  
MAJERHOLC C, MARCELLIN P*

# What should doctors do to prevent Hepatitis B?

1. People who carry no hepatitis B marker have to be vaccinated
2. Everyone in the city should receive information about this disease and its transmission
  - ...BUT ...
  - The messages to deliver differ from one group to another:
    - HBs AG carriers ('HB carriers')
    - People with no HBV marker ('HB free')
    - People protected against HBV, by vaccination or infection) ('HB protected')

# What should doctors do to prevent Hepatitis B?

- Three main serologic groups of people in theory....
  - ....but actually numerous serologic profiles
  - ....54 different serologic profiles can be found in medical files
- Development of an internet program,
  - to help doctors manage prevention,
  - To help doctors decide which prevention skill has to be used
- internet-accessible information leaflets for patients, related to the serologic profile (uploaded by doctor)

# Endpoints

- Main endpoints

1. Can doctors manage full HBV prevention strategies (including information and vaccination when required) among migrant people coming from subsaharian Africa and Asia, with help of an internet-based program?
2. What are the factors that influence such strategies?

- Secondary endpoints

1. What are HBV markers prevalences among those populations?

# Method

- 26 GP and 8 hospital investigators, related to health networks, and working in the north-east areas of Paris and suburb (high rates of migrants)
- 693 migrants included (547 in GPs offices, 146 in hospital)
  - **Inclusion criteria**
    - Born in subsaharian Africa, or Asia
    - Age >18
    - To attend one of the investigators between 5/11/2007 and 29/2/2008
  - **Exclusion criteria**
    - If HIV carrier: immunodepression (CD4 cell count<350/mm<sup>3</sup>)

# Results: preventive strategies

## Information strategies: rates of achievement

	MG and hosp	MG	Hosp
<b>Overall achievement</b>	<b>75%,</b> IC = [71,8;78,2] (n=517)	<b>74%,</b> IC = [70,3;77,7] (n=403)	<b>78%,</b> IC = [71,3;84,7] (n=114)
Among HBV carriers	100% (n=59)	100% (n=45)	100% (n=14)
Among HBV free	82,5% (n=160)	84% (n=125)	77% (n=35)
Among HBV protected	98% (n=397)	99% (n=311)	97% (n=86)
Among isolated anti HBc carriers	92% (n= 75)	95% (n=56)	84% (n=19)

## Vaccination strategies: rates of achievement

	MG+hosp	MG	hosp
People who had to be vaccinated (a)	273	213	60
People who had received vaccination before study (b)	113	88	25
People who remained to be vaccinated (c)	160	125	35
People who have been vaccinated during the study (d)	109	80	29
<b>Vaccination: overall rate of achievement (b+c+d/a)</b>	<b>81%,</b> IC [76,3;85,6]	<b>79%,</b> IC [73,5;84,5]	<b>90%,</b> IC [82,4;97,6] n=60

# Results: Issues, prevalences

## Issues:

Investigators had problems in managing patients with isolated Anti HBC antibody (n=75) :  
 43% received one shot of vaccine, 49% were considered protected, 8% had no information  
 Such divergent attitudes are probably related to discrepancy of guidelines

## Prevalences:

Prevalences			
Coutry of birth	HBV Carriers	HBV contact	HBV free
<b>All patients</b>	<b>9%,</b> IC [6,9;11,1] n=59	<b>32%,</b> IC [28,5;35,5] n=222	<b>23%,</b> IC [19,9;26,1] n=160
Africa	8% n=48	36% n=208	19% n=110
Asia	10% n=11	12% n=14	44% n=50
Senegal	4% n=3	43% n=33	14% n=11
Cameroun	4% n=3	34% n=24	21% n=15
Mali	13% n=17	40% n=53	10% n=13
Ivory Coast	12% n=11	38% n=34	21% n=19

# Univariate analysis

- Social precariousness is predictive of non vaccination before study ( $p=0,02$ )
- Predictive factors of HBV contact are :
  - To be born in Africa(vs Asia) ( $p<0,001$ ).
  - To be born in Mali, Ivory Coast, Senegal, Congo (vs other African countries) ( $p<0,001$ ).
  - To be over 40 ( $p=0,001$ ).
  - To have a small level of education ( $p=0,004$ ).
- Social precariousness is NOT predictive of contact with HBV ( $p=0,15$ )
- To be born in Africa (vs Asia) is predictive of vaccination achievement ( $p=0,02$ ) and information strategy achievement ( $p<0,001$ )



## Conclusion :

- With help of an internet-based program, doctors (hospital and GP) can manage full prevention of HBV transmission (information related to serologic profile, vaccination when required)
- Lack of international consensus on what to do with people carrying only anti HBc: leads to lower prevention achievement rates
- Among migrant people, prevalences of HBV contact and carriage are quite superior to prior available datas