# Hepatitis B/C screening, retrieval of patients and regional organization of hepatitis care

Dr.C.Richter, Arnhem



#### overview

- Screening project Turkey on the rhine
- Screening project Homa (5 countries)
- Heptember project
- Summary of 5 screening projects Arnhem
- Dutch screening projects in Chinese migrants
- Retrieval of patients
- Conclusions
- Recommendations



# Turkey on the rhine

- Community based, no personal invitation
- Key persons: trained Turkish ambassadors,
   Imams, Turkish family doctors
- Information material: posters, flyers, video, website
- Tailored information about hepatitis taking care of Turkish values, culture



# İçimizden biri Hepatit B taşıyor

lemand van ons heeft het hepatitis B virus



Çünkü dünyada her 12 kişiden biri hepatit B taşıyor

Omdat 1 op de 12 mensen hepatitis B heeft

Aşı en etkili ve güvenli korunma şeklidir... Laat je inenten. Vaccinatie is de enige betrouwbare manier...









#### 14 information meetings, mainly in Mosques, on-site test

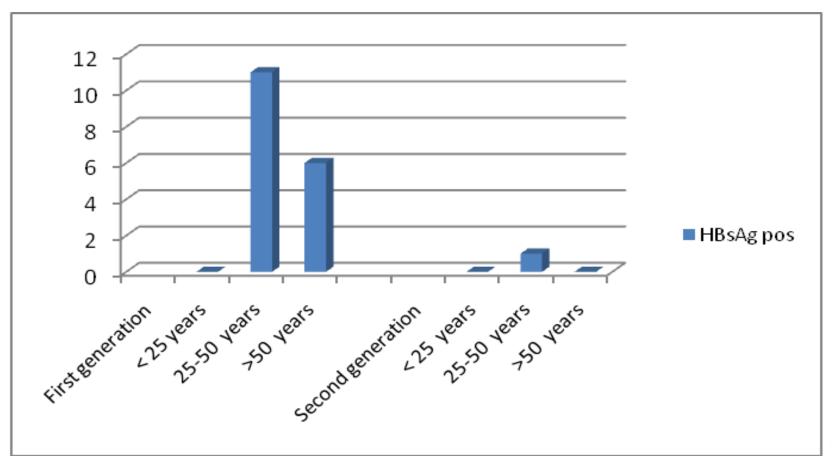




## N= 647, participation rate

	Men	Men	Women	Women
AGE	1. generation	2.generation	1.generation	2.generation
13-24 y	3.2 %	3.1 %	8.4 %	6.6 %
25-50	9.5 %	3.9 %	14.8 %	6.0 %
				4
>50	15.2 %		20.2 %	Rijnsta

#### HBsAg positives (18) in relation to generation and age





Rijnstate

#### **Summary of results:**

#### HBsAg pos:

■ >13 jaar: 16/544 = 2.9%

■ >24 jaar: 16/529 = 3.0%

#### Anti-HBc pos

< 25 years: 6.7%</p>

25-50 years: 30.2%

> 50 Years: 57.7%

Anti-HCV and HCV-RNA pos: 2 pat = 0.4%

Liver cirrhosis: 1 pat with hep.C



Screening migrants for chronic hepatitis B and C from Afghanistan, Iran, Irak, the former Sovjet Republics and Vietnam in the Arnhem region, The Netherlands

Richter C et al: epidemiol.infect.2014



#### Target group first generation migrants (FGM) > 17 years



### **Methods**

- Obtaining full cooperation of municipal office
- Project group 25 people
- Preparation phase: flyers, posters, website, video
- Campaigning phase: includes personal invitation
- Informat/screening: 3 locations, on-site free testing
- Clinical evaluation







# **Participation rate**

■ Vietnam 36.4%

Afghanistan 36.4%

■ Iran 31.2%

■ Iraq 28.4%

"Sovjet-Republics" 11.4%

- Participation rate increasing with age
- Highest in FGM from Vietnam >50 years: 67.5%
- higher participation of women



## Results: HBsAg pos, anti-HCV pos

particip.	HBV	HCV

anti-HCV pos: 9; HCV-RNA pos: 3



# Summary of results

- High HBV prevalence among FGM from Vietnam
- Highest HCV prevalence : FGM Sovjet-Republics
- Among HBsAg pos: 33% HBeAg pos, 48% with HBV-DNA > 2000 IU/ml
- Liver cirrhosis: 1 pat with hep. B, 2 with hep.C

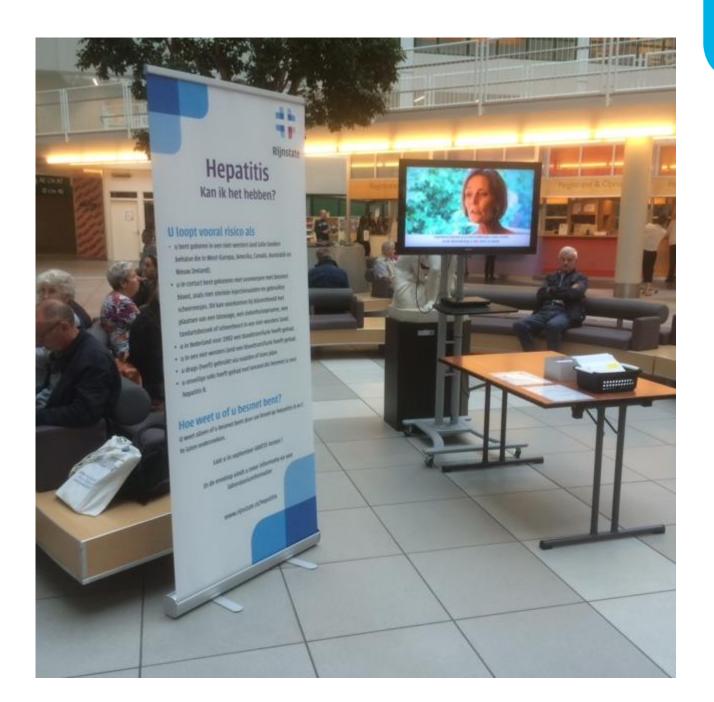




# Heptember, awareness month

- in- hospital campaign, entrance hall, all outpatient clinics
- Target group: 5000 hospital workers, outpatients, visitors with risk of HBV/HCV
- Posters, flyers, film (own production; non-stop in entrance hall and all waiting-rooms), web-site
- Mails sent to all 230 med specialists
- Free blood screen for HBsAg, anti-HBc, anti-HCV







# 5 hepatitis C bloedtransfusie overdraagbaar

**SCHEERMESJES** geboren in een niet-westers land

onveilige seks **besmet** hepatitis B

# Hepatitis

Kan ik het hebben? Laat u GRATIS testen.

nepatitis B

atoeage

onveilige seks ag Conveilige sek

LEVERSCHADE geboren in een niet-westers land chronisch

goede medicijnen besmet zonder ziek te zijn

niet steriel bloed-bloedcontact INJECTIENAALD VIRUS

# 286 participants with full data set

■ Women 70.6%

Born in non-western country 24%

Contact with bloed (instr.,needles..) 38.1%

Blood transfusion before 1992 17,8%

Unsafe sex

• (iv) and base-pipe drug use 0.6%

Bentum P, infectieziekten bulletin, in press



# Results of HBV/HCV screen

■ HBsAg positive 1/266 = 0.4%

• Anti-HCV positive 7/310 = 2.3%

■ HCV-RNA positive 2/310 = 0.6%

#### **Conclusion:**

Low number of participants,
Risk groups relatively well reached
Low number of positive tests



Table 1.									
Project	Country	Method*	Particip	oation	HBsAg		HCV R <mark>NA</mark>		
	Target group				positive		positive		
			n	%**	n	%	n	%	
Turkey o	n the Rhine								
	Turkey	CB/KP	647	10,2	17	2,6	2	0,3	
Homa									
	Afghanistan	PI/CB/KP	293	36,4	6	2,0	1	0,3	
	Iran	PI/CB/KP	153	31,2	1	0,7	0	0,0	
	Irak	PI/CB/KP	290	28,4	2	0,7	0	0,0	
	Former Soviet Republics	PI/CB/KP	65	11,4	0	0,0	1	1,5	
	Vietnam	PI/CB/KP	126	36,4	12	9,5	1	0,7	
China Ea	st Netherlands***								
	China	PI/CB	743	22,4	29	3,9	1	0,1	
HCV saliv	va test (SPEC)****								
	Ex IDU in social care	CB/KP	80				1	1,3	
Heptemb	er								
	All	СВ	313		1	0,3	2	0,6	
Total			2710		68	2,5	9	0,3	
* Met	hod: community based (	CR) porson	al invita	etion (D	I) kov no	rconc	(KD)		
1100	centage of total first-gen			_		30113			
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# **HBV** screening in Chinese migrants

- 5 commun. based screening projects 2009-2013
- 4423 persons screened
- 264 = 6% HBsAg pos
- 25% started treatment within 1 year
- In total 75% needed treatment or strict followup because of high viral load or HCC screen

Veldhuyzen IK, J of Hepatol 2012; Coenen S, EASL O 122,2015



# Need for retrieval in Arnhem region

Table 1. No of patients with hepatitis B and C who need to be retrieved

	No of patients with hepatitis B and C	Lost to follow up or need for re-evaluation	%
Department of infectious diseases	242	72	30
General primary care practice	30	10	33
Municipal Health Service	230	64	28



### **Conclusions**

- Screening projects including personal invitations increases participation rate
- High HBV-prevalence among Vietnamese and Chinese migrants
- About 30% of patients with hepatitis B/C get lost to follow-up in hospital care, primary care and municipal health service: retrieval should get high priority



## Recommendations

Screening projects and retrieval should be embedded in close regional collaboration between:

primary care practice, midwives, community health service, addiction care centers, prisons, laboratories, hepatitis specialists in- and outside hospitals

 National hepatitis plan including guideline for hepatitis B/C screening is highly needed





# Questions?

