# National Viral Hepatitis week in Argentina: raising awareness using Sentinel Units network

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#### **BACKGROUND**

National Viral Hepatitis week is a very good opportunity to inform the people about the impact that this diseases have in terms of Public Health and all the interventions can be done to diminish it.

Besides is a good opportunity also to make surveys inviting people to know their serological status and find individuals that can be opportunely diagnosed and treated. We as National Reference Lab organized, coordinated and used the Sentinel Units (SUs) network for Viral Hepatitis -that covers 18 out of the 24 Argentinean provinces- to do it.

The SU are located and works in public Hospitals in each city.

The objective was to raise awareness giving related information in accordance to the first two axis of action in WHOs Global Programme and through a national simultaneous survey such as "Viral Hepatitis week" offering free tests.

## 

43

54

30

41

53

29

Median

Percentil 75

|Percentil 25|

#### **METHODS**

During the first week of September 2013 and 2014 the SUs network invited people to be informed about the disease, using printed material and offered the chance to be screened for antiHCV and antiHBc taking blood samples. Those samples were then sent to our Lab and tested using commercially available ELISA kits.

The calling strategy was different among SUs: some used mass media, some took individuals samples of who were at the Hospital for other reasons, some used both strategies. A questionnaire with demographic data and risk factors (RF) for transmission was carried out.

Infected individuals were referred to medical attention at each SU. Chi square test with correction for multiple comparisons and multivariable logistic regression for RF association was used.

## Results over 4954 samples

	20	013	2014		Total		
	n	%	n	n %		%	
antiHBc							
Negative Positive	2467 122	95.3% 4.7%	2259 106	95.5% 4.5%	4726 228	95.4% 4.6%	
antiHCV							
Negative	2556	98.7%	2342	99.0%	4898	98.9%	
Positive	33	1.3%	23	1.0%	56	1.1%	

## Results over antiHBc POS samples

	2	013	20	014	Total		
	n	%	n	%	n	%	
HBsAg	122		106		228		
Negative				92.5%	202	88.6%	
Positive	18	14.8%	8	7.5%	26	11.4%	
antiHBs	104		98		202		
Negative	87	83.7%	66	67.3%	153	75.7%	
Positive	17	16.3%	32	32.7%	49	24.3%	

#### RESULTS



- > 24 SUs out of 27 participated in 23 cities located in 15 out of 24 provinces in the 2013 survey, 25 in 2014.
- ➤ In total on both surveys, 4954 individuals fulfilled inclusion criteria : older than 17 years old (yo)
  - 72 % were women. Median age: 42 yo range: 18-89.
  - 70 % reported at least one RF.

### **CONCLUSIONS**

- Calling using mass media increase the possibility to reach individuals with RF that otherwise would not reach the health system.
- Both surveys contributed to increase awareness for viral hepatitis in the country and in particular at the community where the SUs are working.
- Estimative more than 5000 informative flyers were distributed.
- 56 individuals anti-HCV+ and 26 individuals HBsAg+ were identified and referred for medical care and treatment
- We planned to repeat the experience but due to budget constraints we could'nt do it in 2015 and 2016.

	antiHCV				antiHBc			
Variable	Univariate		Multivariate		Univariate		Multivariate	
Variable	OR (IC 95%)	p	OR (IC 95%)	p	OR (IC 95%)	р	OR (IC 95%)	p
2014 (Ref: 2013)	0,76(0,44-1,30)	0.317			0,95(0,73-1,24)	0.699		
Male (Ref: Female)	1,40(0,81-2,43)	0.229			1,89(1,44-2,479)	0.000	1,70 (1,26-2,24)	0.000
Age 41 or > (Ref: < 40)	4,12 (2,07-8,19)	0.000	4,572(2,087-10,015)	0.000	2,41(1,79-3,24)	0.000	2,39(1,74-3,28)	0.000
Blood Transfusion	3,57(2,04-6,25)	0.000	2,38(1,253-4,358)	0.008	1,58(1,12-2,23)	0.010	1,39(0,96-2,00)	0.079
IDU	49,17(21,15-114,30)	0.000	11,18(2,93-42,59)	0.000	2,51(0,751-8,37)	0.135		
Snorted drugs	13,94(7,13-27,24)	0.000	5,53(1,71-17,87)	0.004	1,97(0,98-3,93)	0.058	1,21(0,55-2,69)	0.631
Others drugs	8,09(3,57-18,38)	0.000	1,931(0,54-6,91)	0.310	2,60(1,33-5,08)	0.005	1,89(0,89-4,00)	0.099
Homosexual (Ref: Hetero)	-	0.997			4,90(2,51-9,57)	0.000	3,95(1,91-8,16)	0.000
Bisexual (Ref: Hetero)	-	0.998			8,35(3,23-21,59)	0.000	4,65(1,61-13,47)	0.005
Surgery	1,81(1,02-3,21	0.042	1,10(0,58-2,11)	0.767	1,28(0,98-1,69)	0.070	1,06(0,78-1,43)	0.702
Tatoo	1,97(1,03-3,76)	0.039	1,35(0,57-3,21)	0.493	1,09(0,739-1,62)	0.670		
Unsafe Injections	3,31(1,60-6,82)	0.001	1,571(0,68-3,66)	0.292	1,87(1,19-2,96)	0.007	1,37(0,85-2,21)	0.200
HIV+	3,94(1,76-8,83)	0.001	1,916(0,69-5,29)	0.212	3,50(2,20-5,53	0.000	2,63(1,58-4,38)	0.000

In multivariable analysis, positivity for antiHBc was associated with (OR; 95% CI): ages higher than 40 (2.4;1.7-3.3), male gender (1.7;1.3-2.3), HIV+ (2.6;1.6-4.4); bisexuality (4.6;1.6-13.5) and homosexuality (3.9;1.9-8.1). Positivity for antiHCV: ages higher than 40 (4.6;2.1-10); transfusion (2.3;1.2-4.4); intravenous drugs use (11.2;2.9-42.6); snorted drugs (5.5;1.7-17.9) and surgery (1.8;1.0-3.2).

## **CONFLICTS OF INTEREST**

None

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