

PILOT PROJEKT EPIDEMIOLOŠKOG PRAĆENJA HBV IHCV U SENTINEL BOLNICAMA U EU

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Stručni skup ključnog epidemiološkog indikatora EMCDDA „Zarazne bolesti engl. Drug related infection diseases (DRID) uz predstavljanje dokumenta Protokola za provedbu RDS istraživanja te Protokola za provedbu rutinskih testiranja na HCV i HIV među ovisnicima

Marija Bistrica, 8.12..2021.



Pilot projekt epidemiološkog
praćenja hepatitisa B i C u sentinel
bolnicama u zemljama članicama
EU/EEA (Study pilot sentinel
surveillance for Hepatitis B and C in
the EU/EEA)
EPICONCEPT/ECDC/HZJZ



■ Pilot projekt

- Rumunjska, Hrvatska, Španjolska
- Prikupljanje podataka u 2020.
- Online platforma Voozanoo
- Pilot projekt
- Odobrilo Etičko povjerenstvo HZJZ-a i Klinike za infektivne bolesti „Dr. Fran Mihaljević”
- Akutni i kronični u razdoblju siječanj- lipanj 2019.
 - Praćeni do prosinca 2019.



■ Cilj

- istražiti izvedivost prikupljanja podataka na ovaj način (sentinel istraživanje)
- prikupiti nacionalno reprezentativne podatke (koliko se može):
 - proširenosti komplikacija (kasnih dijagnoza)
 - kontinuumu skrbi za HBV i HCV: kriteriji liječenja, status liječenja i ishodi liječenja kroničnih slučajeva HBV i HCV i skrbi
- proširiti implementaciju na sve EU/EEA države (u slučaju izvedivosti)



Viewing ECDC-722's screen



Pilot results – overview

	HBV		HCV	
	Acute	Chronic	Acute	Chronic
Croatia (3 sites)	6	24	1	92
Romania (3 sites)	5	150	2	95
Spain (1 site)	2	55	4	53
TOTAL	13	229	7	240



Table 1: Participating sentinel sites by size of catchment population and type of service, 2020.

Clinic	Type of service	Size of catchment population	chronic HBV infections reported		chronic HCV infections reported	
			Number	(%)	Number	(%)
Croatia			24	(10)	92	(38)
Clinical Hospital Centre, Split	Infectious disease	455,000	9		35	
Clinical Hospital Merkur, Zagreb	Gastro-enterology/national liver transplant service	4,100,000	3		10	
University Hospital for Infectious Diseases Dr. Fran Mihaljević (UHID), Zagreb	Infectious disease	1,000,000	12		48	
Romania			150	(66)	95	(40)
University Emergency Hospital, Bucuresti;	Gastro-enterology	304,000	141	62%	47	
Clinical Infectious Diseases Hospital, Cluj-Napoca;	Infectious disease	36,000	1		2	
Clinical Infectious Diseases Hospital, Iasi	Infectious disease	104,000	8		46	
Spain			55	(24)	53	(22)
Hospital Universitario Valle Hebrón, Barcelona	Hepatology	450,000	55		53	22%
Total			229	(100)	240	(100)

ECDC: Conference abstract

A pilot sentinel surveillance to monitor the treatment of chronic hepatitis B and C infections in European centres in 2019.

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12. Clinical Infectious Diseases Hospital Iasi, Romania
13. Clinical Infectious Diseases Hospital Cluj-Napoca, Romania

A pilot sentinel surveillance to monitor the treatment of chronic hepatitis B and C infections in European centres in 2019

Nardone A¹, Nerlander L², Duffell E², Valenciano M¹, Buti M³, Marcos-Fosch C³, Nemeth-Blažić T⁴, Popovici O⁵, Vince A⁶ on behalf of the European HBV/HCV Sentinel Surveillance Group⁷

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Introduction

- Chronic hepatitis B (HBV) and hepatitis C (HCV) infections cause approximately 84,000 deaths annually within the European Union and Economic Area [Mardh 2020]
- Treatment is a core components of the WHO Global Health Sector Strategy for the elimination of viral hepatitis [WHO 2016]
- European targets for hepatitis elimination by 2020 require 75% of eligible patients to be treated and 90% to have achieved viral suppression [WHO 2017]

Objectives

- Pilot the feasibility of establishing a European sentinel surveillance for viral hepatitis
- Assess treatment and treatment outcomes against international targets

Methods

- Retrospective enhanced reporting of patients presenting at sentinel clinic
- 7 pilot clinics in three countries (3 sites in Croatia, 3 in Romania and 1 in Spain).
- Clinical records of patients with a confirmed diagnosis of chronic HBV and/or HCV who presented for the first time between 1 January 2019 and 30 June 2019 were reviewed from date of first attendance through to 31 December 2019.
- Data were collected on socio-demography, clinical history, diagnostic and virological results, and treatment and treatment outcomes.

*Chronic HBV case definition

- Locally reported as chronic and
- HBsAg+ or HBsAg+ or HBV-DNA+ and
- no report of Anti-HBc IgM+

*Chronic HCV case definition

- Locally reported as chronic and
- HCV RNA+ or HCV-core Ag+ and
- no report of anti-HCV-antibody



Materials and Methods

- Retrospective enhanced data collection of patients presenting at **seven participating clinics in three countries** (three sites in Croatia, three in Romania and one in Spain).
- Clinical records of patients that conformed to the European Union case definition of chronic viral hepatitis and **who presented for the first time between 1 January 2019 and 30 June 2019 were reviewed from date of first attendance through to 31 December 2019.**
- Data were collected from cases on socio-demographic characteristics, clinical history, laboratory results, treatment and treatment outcomes.
- Univariate analysis was performed to describe treatment eligibility, uptake and outcomes for viral hepatitis cases.

Results

- 229 HBV and 240 HCV cases reported by the 7 sites in three countries

	HBV n/N (%)	HCV n/N (%)
Reporting country		
Croatia	24/229 (10)	92/240 (38)
Romania	150/229 (66)	95/240 (40)
Spain	44/229 (24)	53/240 (22)
Gender		
Female	101/228 (44)	127/240 (53)
Age		
Median years (IQR)	55 (41-64)	54 (44-63)
Route transmission		
Sexual	20/112 (18)	1/153 (1)
Injecting drug use	2/112 (2)	75/153 (49)
Healthcare associate	25/112 (22)	46/153 (30)
Mother-to-child	12/112 (11)	1/153 (1)
Other	12/112 (11)	30/153 (20)

Table 1: Number reported chronic hepatitis B (HBV) and C (HCV) cases reported by participating countries, hepatitis pilot sentinel surveillance system, January-June 2019

- Of the 229 chronic HBV infections:
 - treatment status was reported for 203
 - 80 were reported as eligible for treatment according to either local or EASL criteria
 - 41 of the 80 eligible cases were treated
 - 37 achieving viral suppression (89%; 33/37) and
 - all were continuing treatment.

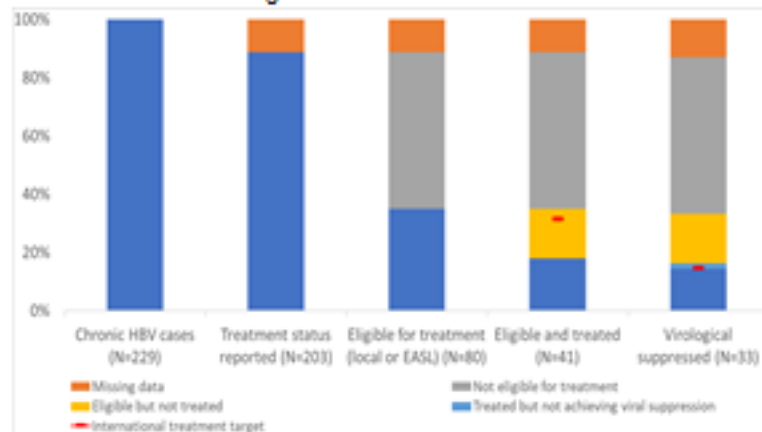


Figure 1: Continuum of care for chronic hepatitis B (HBV) cases as reported hepatitis pilot sentinel surveillance system, January-June 2019.

- 37% of chronic HBV cases reported Amino Alanine Transferase (ALT) above upper limit normal (ULN) and 29% stage F2 fibrosis or greater
- 68% of chronic HCV cases reported ALT above ULN and 55% stage F2 fibrosis or greater (Table 2)

	HBV n/N (%)	HCV n/N (%)
Amino Alanine Transferase		
Above Upper Limit Normal	88/205 (37)	162/240 (68)
Fibrosis stage		
F2 or greater	35/120 (29)	130/238 (55)
Cirrhosis		
Diagnosed	17/224 (8)	12/237 (5)
Hepatocellular carcinoma		
Diagnosed	7/228 (3)	7/238 (3)

Table 2: Clinical characteristics of chronic hepatitis B (HBV) and C (HCV) cases reported by participating countries, hepatitis pilot sentinel surveillance system, January-June 2019

- Of the 240 chronic HCV infections:
 - treatment status was reported for 231
 - 179 (75%) were reported as being treated
 - 96% were treated with Direct Acting Antivirals
 - 98% had achieved sustained virological response
 - 178 had ended treatment

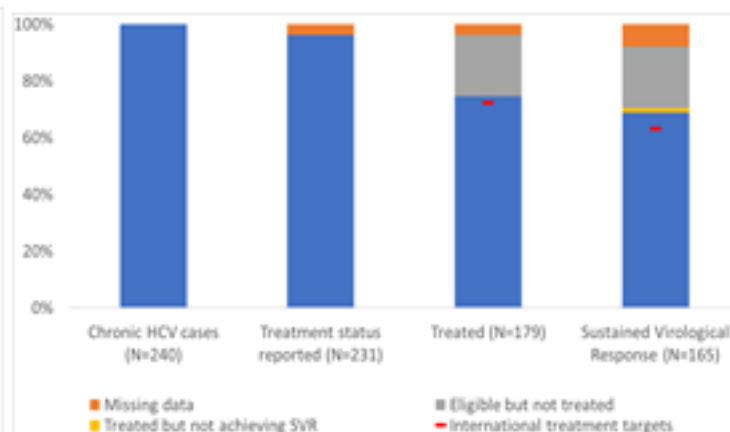


Figure 2: Continuum of care for chronic hepatitis C (HCV) cases as reported hepatitis pilot sentinel surveillance system, January-June 2019.

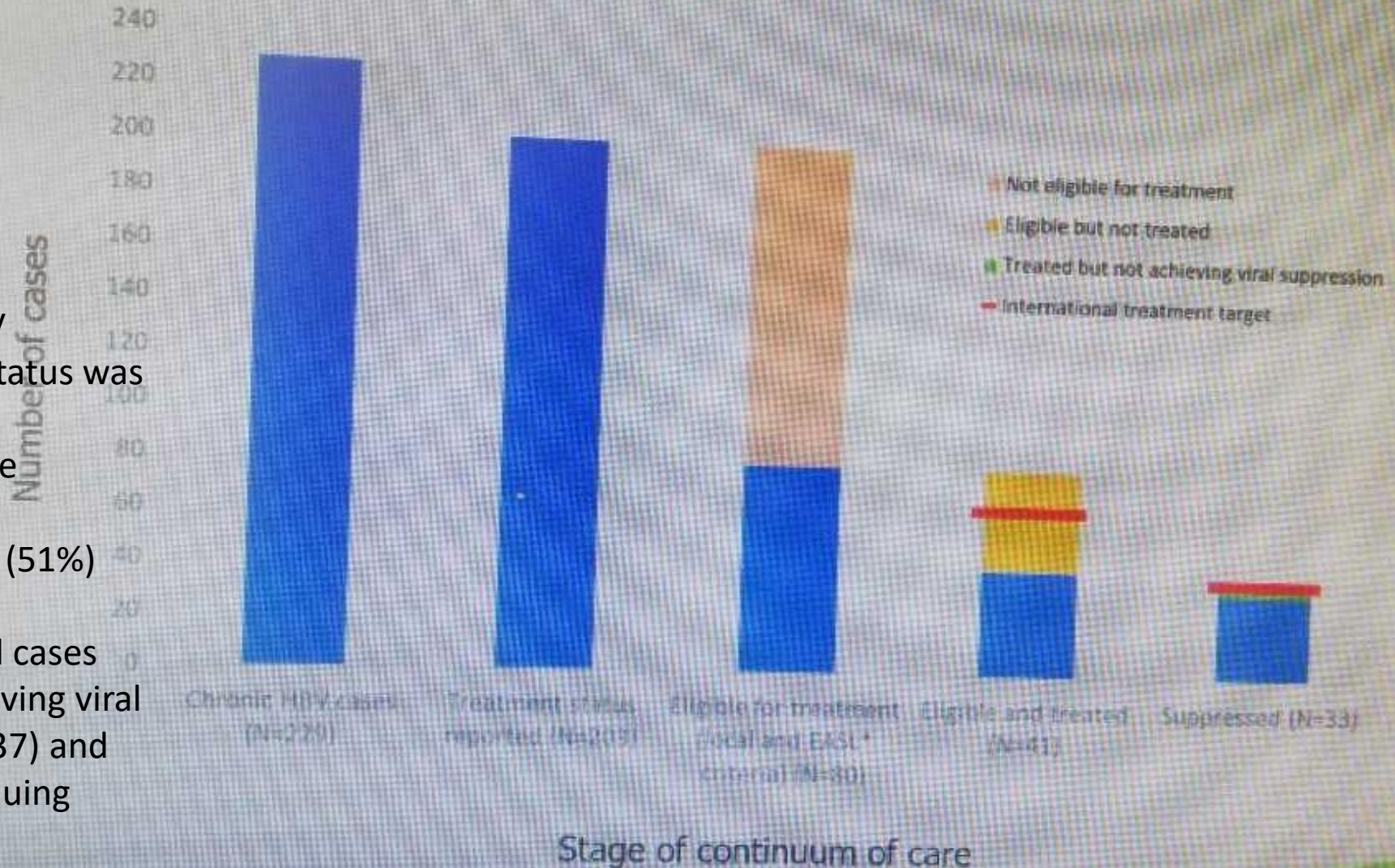


Results

- The seven sentinel sites in the three countries reported a total of 229 chronic HBV and 240 chronic HCV infections.
- The University Emergency Hospital, Bucharest reported the greatest number of chronic HBV infections (141; 62%)
- The Hospital Universitario Valle Hebrón, Barcelona, reported the greatest number of chronic HCV infections (53; 22%).
- Of the 229 chronic HBV infections, treatment status was reported for 203 (89%)
- Of these, 80 (39%) were reported as eligible for treatment of whom 41 (51%) were treated.
- The majority of treated cases were reported as achieving viral suppression (89%; 33/37) and all but one were continuing treatment.
- Of the 240 chronic HCV infections, treatment status was reported for 231 (96%).
- Of these, 179 (77%) were reported as being treated and 165 out of the 169 cases with treatment outcome data (98%) had achieved sustained virological response. T
- The majority of treated HCV cases received Direct Acting Antivirals (99%; 174/176) and had ended treatment (99%; 177/178).
- Treatment uptake for both HBV and HCV varied between countries.



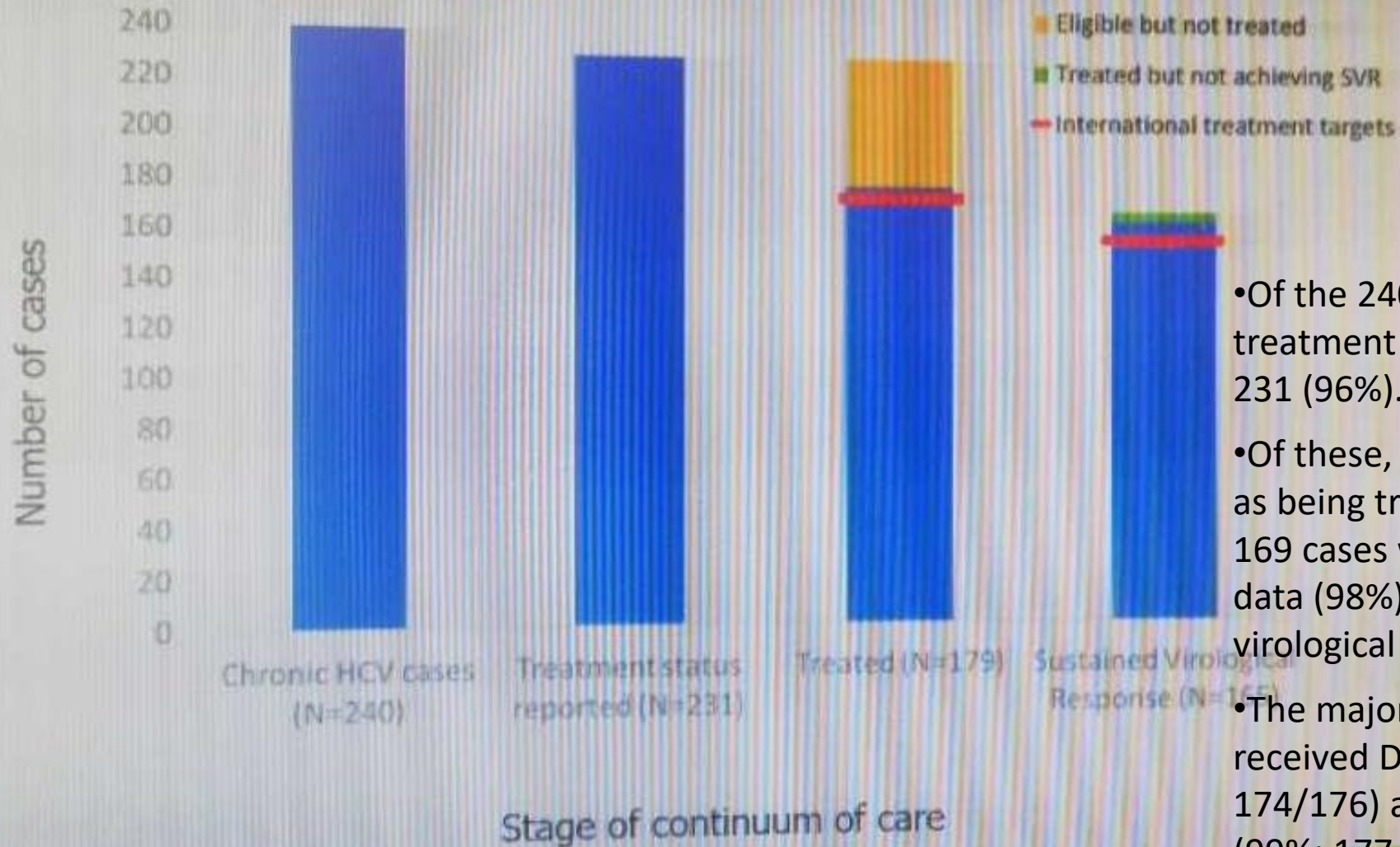
Results – treatment HBV



Of the 229 chronic HBV infections, treatment status was reported for 203 (89%). Of these, 80 (39%) were reported as eligible for treatment of whom 41 (51%) were treated.

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Results – treatment HCV



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- The majority of treated HCV cases received Direct Acting Antivirals (99%; 174/176) and had ended treatment (99%; 177/178).

Conclusions and recommendations

- The WHO 2020 targets of
 - 75% treatment of eligible cases was missed for HBV cases (51%) and achieved for HCV cases (77%)
 - 90% viral suppression of treated cases was just missed for HBV cases (89%) and achieved for HCV cases (98%)
- Further research is needed to address the low uptake of HBV treatment reported here and in other studies
- The insights gained from this pilot justify its future expansion to monitor the progress in achieving hepatitis control targets such as treatment uptake as these are currently not available in many countries

European HBV/HCV Sentinel Surveillance Group:

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This project received funding from the European Centre for Disease Control and Prevention

Conclusions: The WHO 2020 treatment targets for the elimination of hepatitis of 75% eligible cases treated were missed for HBV but achieved for HCV, although there was variation in achieving these targets between countries. The target of 90% viral suppression of treated cases was just missed for HBV cases and achieved for HCV cases. Limitations included the representativeness of sites, missing data and a follow up period that was possibly too short to fully evaluate treatment initiation and outcomes for HBV cases. The pilot demonstrated the feasibility of implementing a hepatitis sentinel surveillance to monitor the progress in achieving European hepatitis treatment targets.

Hvala na pažnji

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