Hepatitis C Burden in Romania

2016-2017 Evaluation

2018 Challenges

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ROMANIA, HCV EPIDEMICS' UPDATE

- Total population 20,121,641 persons (2011 Census)

- **Prevalence**: 3,3%,
  - 663,981 persons potentially infected with HCV
    - ✓ 85% with potentially viral replication
    - ✓ 99% from genotipe 1b infections (blood transfusion)
  - 563,406 potentially persons with active progressive disease

- **Incidence**: > 7,500 new cases of infection / year
  - 7,000-8,000 persons diagnosed with active disease / year

- **Romania, top 20 worldwide regarding the number of HCV patients**
  - 6,000 treated persons with DAA in 2016 (1.5%)

ROMANIA

The prevalence of HBV, HCV and HIV infection in Romania - a nationwide screening program for surveillance of viral infections

This study is part of the RO 19.02. Project “Strengthening the prevention and control of HIV/AIDS, HBV, HCV in Romania”, financed by the Norway Financial Mechanism 2009-2014, “Public Health Initiatives”.

12 000 persons screened

Median age **46** (IQR: 36, 57) years

62.7% females

Oana Săndulescu /October 2016
2nd Central and Eastern European Meeting on
Viral Hepatitis and Co-Infection with HIV

Methods

- **Nationwide screening program (2014-2016)**
  - HBsAg, anti-HCV, anti-HIV
- **Confirmation and characterization of positive cases**
  - HBV-DNA, HCV-RNA, HIV-RNA
- **Risk factor assessment**
  - Standardized paper-based questionnaire
  - Romanian population vs. international students
- Statistical analysis: IBM SPSS Statistics v.22 (Armonk, USA)

A Streinu-Cercel et all,BMC Infectious Diseases 2016, Volume 16 Suppl 3 DOI 10.1186 s12879-016-1480-8

Romania ...

4,9%

Anuarul Statistic al României(http:// www.insse.ro/Anuar%20200S/CAPITOLE/cap2.pdf
Molnar G. Şi col., Bacteriologie, Virusologie, Parazitologie, epidemiologie 1994;30:141-149

3,23%

Molnar G. Şi col., Bacteriologie, Virusologie, Parazitologie, epidemiologie 1994; 30:141-149; 2. Gheorghe L. şi col – article in press 2009

4,4%

Date obtinute din campaniile de testare 2014-2015, A Streinu-Cercel nepublicate

HCV testing

Number of positive tests

Total number of tests

A Streinu-Cercel et all,BMC Infectious Diseases 2016, Volume 16 Suppl 3 DOI 10.1186 s12879-016-1480-8

HCV hotspots

A Streinu-Cercel et all,BMC Infectious Diseases 2016, Volume 16 Suppl 3 DOI 10.1186 s12879-016-1480-8

Positive HCV tests

- 3.3% positive anti-HCV tests => 1.9%
- 60.7% of the positive tests had negative **HCV-RNA**
- 9 counties in Romania were “HCV-free”

A Streinu-Cercel et all,BMC Infectious Diseases 2016, Volume 16 Suppl 3 DOI 10.1186 s12879-016-1480-8

After screening in 2016

- Vaccination decreased the incidence of HBV infection 21-fold

- 12000 persons screened
  - 7.7% positive HBsAg
  - **1.9% confirmed HCV infection**
  - 0.4% positive HIV tests

- Targeted outreach programs in the identified hotspots

A Streinu-Cercel et all,BMC Infectious Diseases 2016, Volume 16 Suppl 3 DOI 10.1186 s12879-016-1480-8

Knowledge, attitudes and practices of the general population regarding HIV/AIDS, HBV&HCV

Gender

Age

Average

46,5 y.o.

Residence area

Educational level

Number of cases: 1005 Sample: general population

A Streinu-Cercel et all,BMC Infectious Diseases 2016, Volume 16 Suppl 3 DOI 10.1186 s12879-016-1480-8

Disease awareness
How can HCV/HBV be transmitted?

Number of cases: 1005/200 Sample: general population/IDUs

A Streinu-Cercel et all,BMC Infectious Diseases 2016, Volume 16 Suppl 3 DOI 10.1186 s12879-016-1480-8

Have you ever went through screening for ?

General population

Hepatitis B/C

IDUs

General population

HIV

IDUs

Number of cases: 1005/200 Sample: general population/IDUs

A Streinu-Cercel et all,BMC Infectious Diseases 2016, Volume 16 Suppl 3 DOI 10.1186 s12879-016-1480-8

Testing Campaign HCV 2017

- Final Results -

OVERVIEW OF TESTING CAMPAIGN

11.713 tested persons:

- 240 persons tested pozitive **(2,0%)**

Testing campaigns in multiple locations:

- **6.556** tested in **HOSPITALS PERSONNEL** (population at risk tested) (56%)
  - Bacău, Bihor, București, Cluj, Constanța, Dolj, Galați, Iași, Mureș, Timiș
- **5.157** tests on **STREET Campaign** (general population testing) (44%)
  - Bihor, Botoșani, Brașov, București, Cluj, Constanța, Dolj, Galați, Iași, Mureș, Suceava

Incidence > national average (3,3%) for general population

- **3,9%** positive tests (202) during **STREET Campaign**
- **0,6%** positive tests (38) during **HOSPITAL PERSONNEL Campaign**

Source: INBIMB

2017 CAMPAIGN OVERVIEW

11.713 tests

- 240 positive tests (2,0%)

	Total tests	Positive Tests	
SUCEAVA	318	16	*5,0%*
BOTOȘANI	96	3	*3,1%*
BUCUREȘTI	4,907	140	*2,9%*
CLUJ	331	7	*2,1%*
IAȘI	2,636	49	*1,9%*
BIHOR	216	4	*1,9%*
CONSTANȚA	610	6	*1,0%*
MUREȘ	209	2	*1,0%*
TIMIȘ	1,000	7	*0,7%*
DOLJ	512	3	*0,6%*
GALAȚI	487	2	*0,4%*
BACĂU	318	1	*0,3%*
BRAȘOV	73	0	*0,0%*

Source: INBIMB

> 2,0% | > 1,0% | <1,0%

GENDER DISTRIBUTION

11.713 tests => 10.556 valid CNPs

- 8.028 persons female **(76%)**
- 2.528 persons male (**24%**)

Source: INBIMB

AGE DISTRIBUTION

11.713 tests=> 10.556 valid CNPs

- 6.708 persons 31-60 (64%)
- 41-50 main segment (2.913 persons ≈ 28%)
- **46 years median age**

Source: INBIMB

2017 HOSPITALS' PERSONNEL CAMPAIGN RESULTS

6.556 tests

- 38 positive tests (0,6%)

	Total tests	Positive results	
IAȘI	1.451	16	1,1%
TIMIȘ	1.000	7	0,7%
CONSTANȚA	588	4	0,7%
BIHOR	200	1	0,5%
GALAȚI	445	2	0,4%
CLUJ	245	1	0,4%
BUCUREȘTI	1.637	6	0,4%
BACĂU	318	1	0,3%
MUREȘ	184	0	0,0%
DOLJ	488	0	0,0%

Source: INBIMB

> 2,0% | > 1,0% | <1,0%

2017 STREET CAMPAIGN RESULTS

5.157 tests

- 202 positive tests (3,9%)

	Total tests	Positive results	
BIHOR	16	3	23,1%
DOLJ	24	3	14,3%
CONSTANȚA	22	2	10,0%
MUREȘ	25	2	8,7%
CLUJ	86	6	7,5%
SUCEAVA	318	16	5,3%
BUCUREȘTI	3270	134	4,3%
BOTOȘANI	96	3	3,2%
IAȘI	1185	33	2,9%
GALAȚI	42	0	0,0%
BRAȘOV	73	0	0,0%

> 2,0% | > 1,0% | <1,0%

Source: INBIMB

2016 – 2018 DAA Treated patients in Romania

- More than 18 000 patients treated with DAA
- SVR obtained in ≈ 99%

UPDATE OF THE FRAMEWORK CONTRACT 2018-2019 MOH & NATIONAL INSURANCE HOUSE

- HBsAg and
- HCV-ABs lab tests

should be recommended by GPs for all listed patients

GENERAL PRACTITIONERS, A TURNING POINT IN HCV CONTROL

General Practitioner

- ✓ *Testing*

  (HCV Ab and HBsAg testing)

- ✓ *Patient referral to specialists for diagnosis confirmation and treatment initiation*

- ✓ *Patient management (including treatment adherence)*

NATIONAL DISEASE REGISTRY, A KEY TOOL

CONCLUSIONS

- *Development of* ***National Testing Program***
  - HCV testing in early phases of infection,
  - Eliminating HCV virus as a foundation of a cost-efficient approach

- ***Defining of National Prevention Standards***
  - **HCV and/or HBV infection can be 100% prevented**
  - Action plan at **GP and hospital** level
  - General population education

- ***Development of a free access to treatment policy***
  - **Elimination of access to treatment criteria**
  - **Applying the principle "first referral, first treated"**