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Developing a national plan: Greece

HELLENIC NATIONAL PLAN FOR THE MANAGEMENT OF HEPATITIS C

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HELLENIC NATIONAL PLAN FOR THE MANAGEMENT OF HEPATITIS C

July 28, 2017

- 1. Analysis of current Status (Background)**
- 2. Strategic design**
- 3. Goals and Actions**
- 4. Implementation process**

1. Analysis of current Status

- 1.1. Hepatitis C as global public health problem
- 1.2. Hepatitis C as public health problem in Greece
- 1.3. Strategy and role of WHO in the control of hepatitis C
 - 1.3.1. Global health sector strategy on viral hepatitis
 - 1.3.2. Recommendations for management and treatment of hepatitis C
- 1.4. Actions and policies for the management of hepatitis C
 - 1.4.1. Actions and policies for the management of transmissible diseases
 - 1.4.2. Epidemiologic surveillance of viral hepatitis
 - 1.4.3. Registry of patients with hepatitis C
- 1.5. Legal frame for protection of public health
- 1.6. Services, Structure and Organization of Public Health Sector for the management of hepatitis C in Greece
- 1.7. SWOT analysis

HCV prevalence in Greece

	Anti-HCV(+), %	Anti-HCV(+), n (~9 M adults)	Chronic HCV, n (~80% viremia)
Hprolipsis ¹			
Age-adjusted estimation	0.83	74,700	59,760
Including high-risk groups	1.03 (95% CI: 0.75-1.44)	92,700 (67,500 – 129,600)	74,200 (54,000-104,000)
Telephonic survey ²			
Age-adjusted estimation	1.79	161,100	128,800
Including high-risk groups	1.87	168,000 (94,200-241,000)	134,400 (75,400-192,800)

¹Touloumi G et al. EASL 2017; ²Papatheodoridis G et al. J Viral Hepat 2015,22:409-15.

Variations of anti-HCV prevalence in different areas of Greece

	% Anti-HCV(+)
Zakynthos – adults ^[1]	1,25
Crete- ≥15 years ^[2]	
Random household sample	3,00
Primary care health centers	10,90
Several areas - subjects 0-40 years ^[3]	
Katakolo	7,50
Katakolo area	2,89
Lamia	2,77
Nemea	1,11
Archangelos, Rhodes	0,72
Santorini	0,61
South-Western Greece ≥15 years ^[4]	0,50
Northern Greece ≥13 years ^[5]	0,19
Thessaly ≥ 18 years ^[6]	0,34

^[1] Goritsas et al, 2000; ^[2] Lionis et al., 1997a; ^[3] Papadimitropoulos et al., 1998; ^[4] Gogos et al., 2003; ^[5] Papoutselis et al., 2001; ^[6] Gatselis et al., 2007

Anti-HCV prevalence in high-risk groups in Greece

	% Anti-HCV(+)
Patients under hemodialysis	
1993 ^[1] / 2003 ^[2] / 2005 ^[3]	29,00 / 7,50 / 24,00
Thalassemia patients ^{[4], [5]}	38-40
People who inject drugs ^[6]	
Athens greater area	79,90
Other areas	68,10
HIV(+)	
MSM ^[7]	8,10-8,60
Heterosexual ^[7]	1,70-8,80
Transfusions ^[7]	45,50
People who inject drugs ^[8]	92,30
Incarcerated	
For crimes associated with illegal drugs ^[9]	58,20
For rape or sexual abuse ^[10]	6,50
Prostitutes ^[11]	2,30

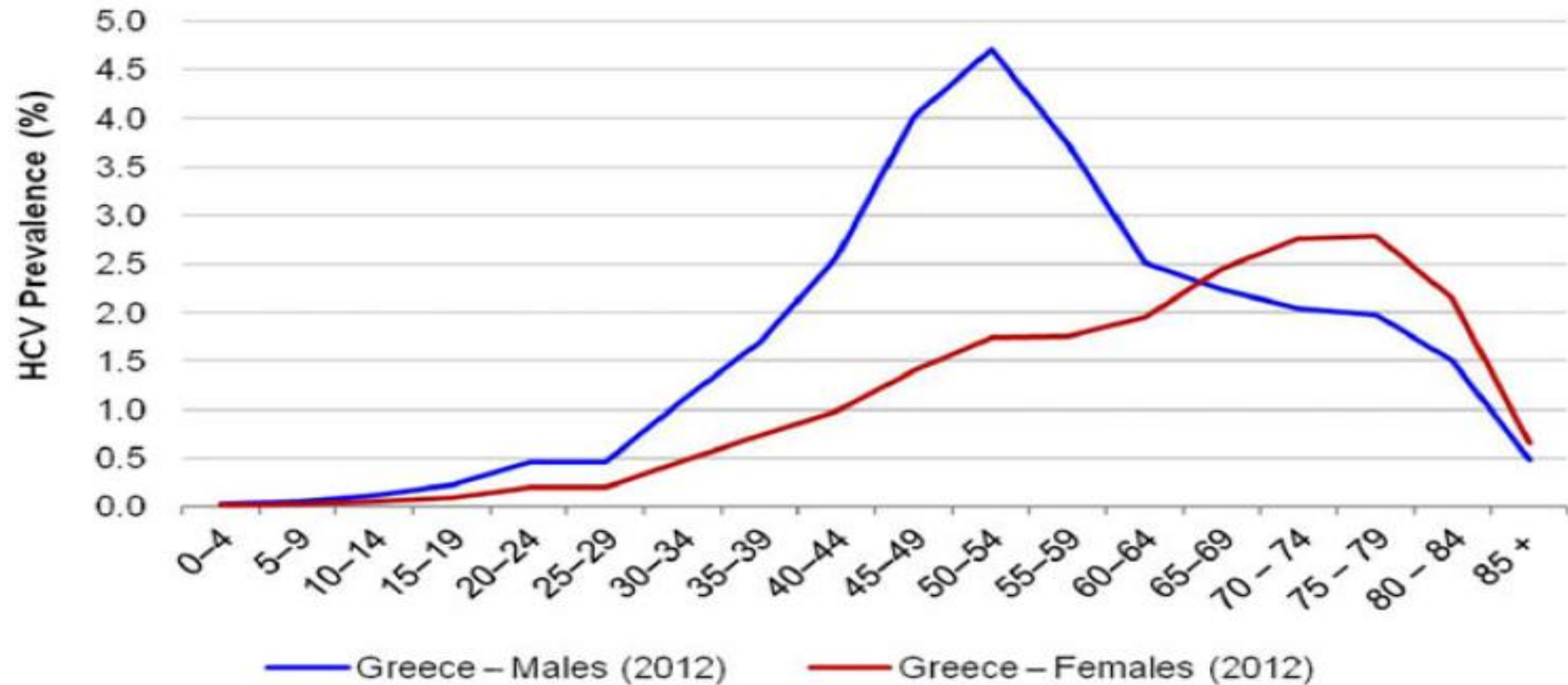
[1] Sypsa et al., 2005; [2] Marinaki et al., 2015; [3] Rigopoulou et al., 2005; [4] Triantos et al., 2013; [5] Zachou et al., 2017; [6] ΕΚΤΕΠΝ, 2016; [7] Dimitrakopoulos et al., 2000; Elefsiniotis et al., 2006; [8] Sypsa et al., 2016; [9] Malliori et al., 1998; [10] Giotakos et al., 2003; [11] Papadogeorgaki et al., 2006

Anti-HCV prevalence in immigrants in Greece

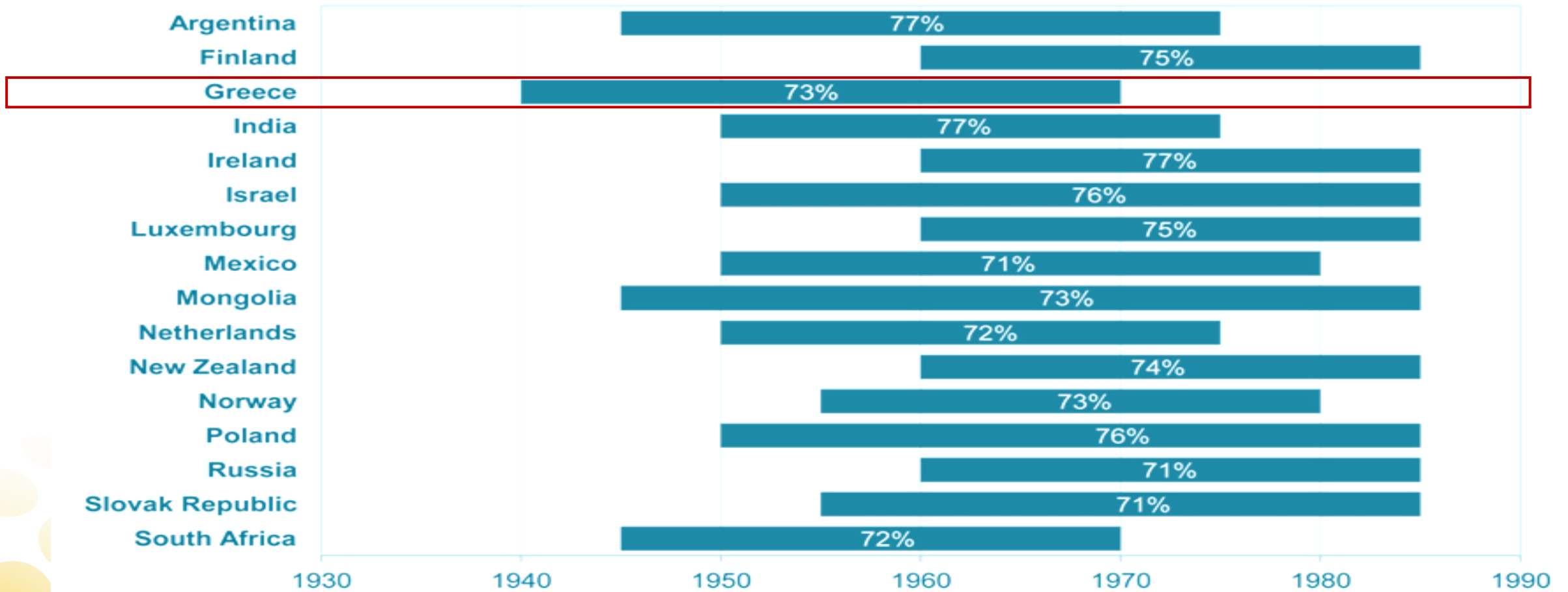
	% Anti-HCV(+)
Immigrants for <6 months in Greece ^[1]	
Africa	4,2
Asia	3,3
Europe	4,5
Hprolipsis – Immigrants for >6 months in Greece ^[2]	
Balcan countries	1,5
Eastern Europe	14,0
Asia – Middle East	0,0
Africa	3,6
Immigrants from Albania (n=1,025) ^[3]	1,75

^[1] Papadakis et al., 2013; ^[2] Touloumi et al., 2017; ^[3] Dalekos et al., 1995

Anti-HCV prevalence in Greece in relation to age and gender (2012)



Anti-HCV prevalence in Greece in relation to year of birth (birth cohort)



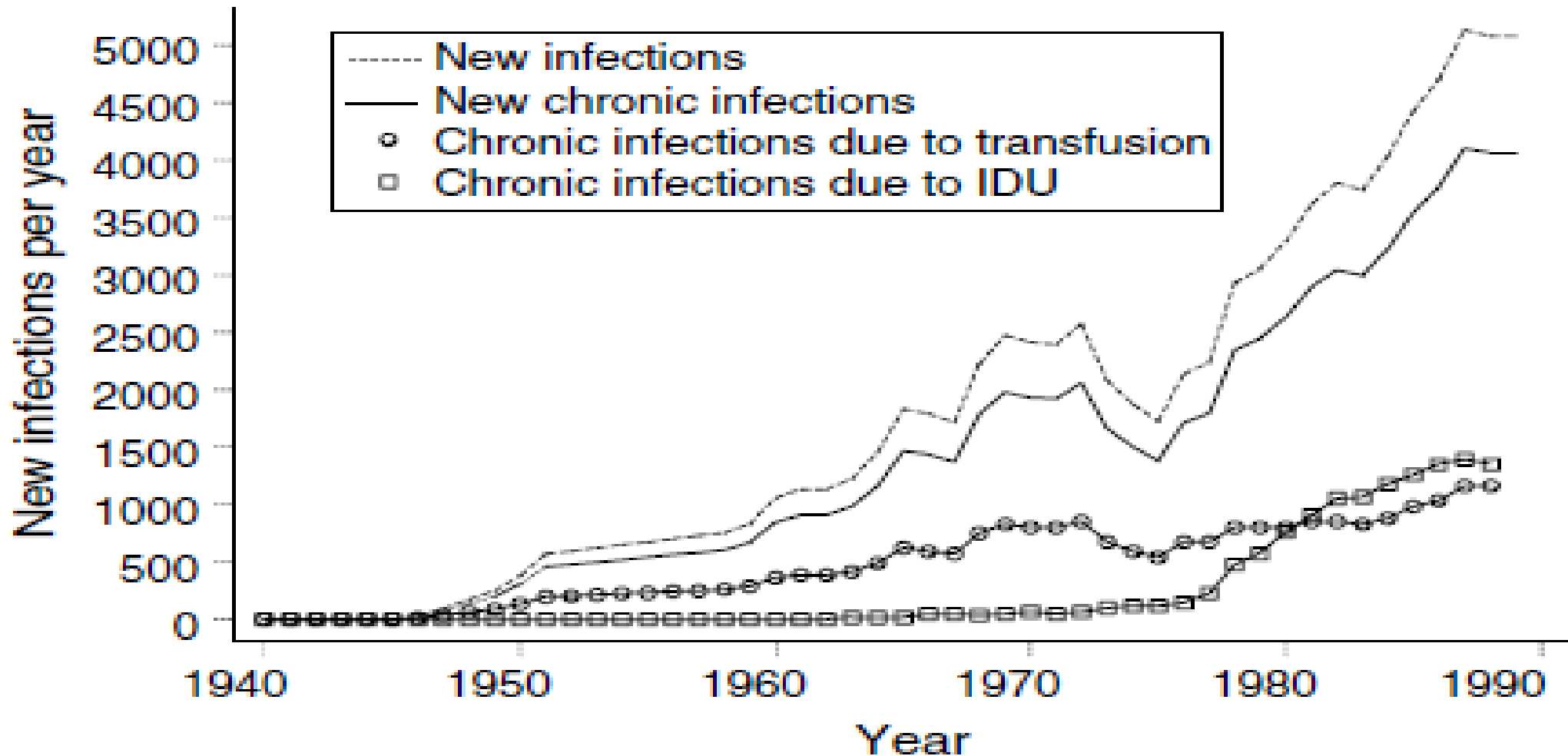
Source of infection for HCV patients in Greece

	(%)
HEPNET (2817 patients with chronic hepatitis C admitted at tertiary liver centers in 1997-2006) [1]	
People who inject drugs (current or past)	30,7
Blood/Blood products transfusion	22,6
Other	10,1
Unknown	36,6
1146 anti-HCV(+) subjects from two liver centers in Athens (2002-2010) [2]	
People who inject drugs (current or past)	47,0
Blood/Blood products transfusion	7,0
Other	6,0
Unknown	40,0

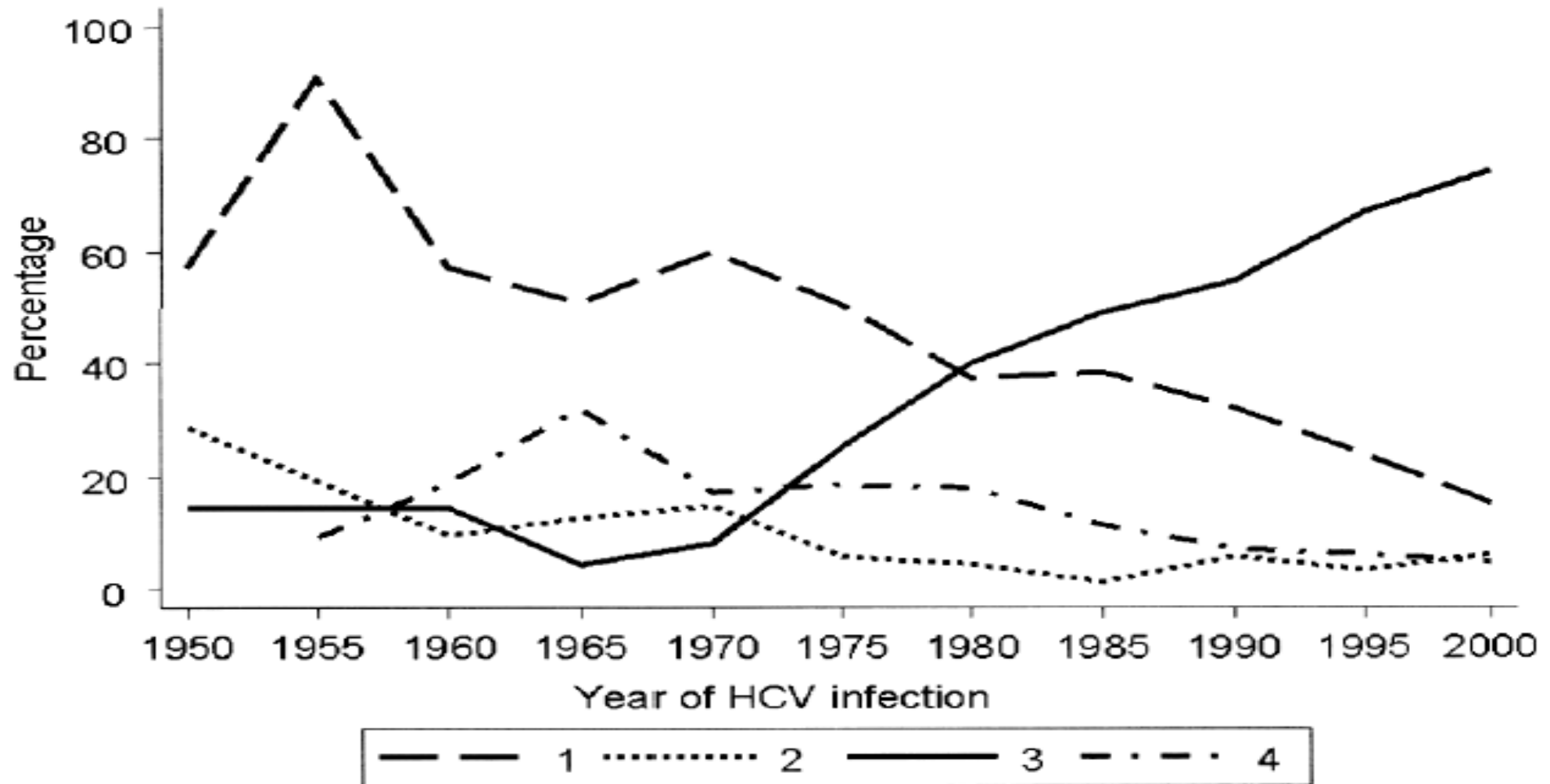
[1] Raptopoulou M et al. Hippokratia 2011,15:26-31;

[2] Papadopoulos N et al. Eur J Gastroenterol Hepatol 2013; 25:587-93

Incidence of HCV infection in Greece until 1990



HCV genotype distribution in Greek patients in relation to year of infection



2. Strategic design

2.1. Aim

2.2. Values

2.3. Priorities

2.4. Administration

2.5. Strategic goals

2.5.1. Development of appropriate social environment

2.5.2. Organization of holistic health care services for the management of patients' needs

2.5.3. Organization of international co-operation

2.5.4. Development of mechanisms of data collection and registries as a basis for evidence based plans of health policies

2.6. Anticipated outcomes

2.1. Aim

- To show the importance of hepatitis C as national public health problem in Greece and the significance of prompt diagnosis and surveillance from the appropriate bodies in order to offer the optimal management for the protection of public health.
- Long-term aim is to achieve gradual management and control of the disease and eventually its elimination, as it is described in the WHO plan by 2030.

2.6. Anticipated outcomes

- Gradual decline in the existing cases and the burden of disease in morbidity and mortality through equal access of appropriate treatment to patients
- Decline of viral transmission through health behaviors, public awareness and programs of prevention and treatment, particularly in the high-risk groups
- Elimination of hepatitis C as a major threat for public health, which could be gradually achieved from the achievement of the above two outcomes, according to the global strategy and the WHO targets

3. Arms and actions of the Hellenic National plan for hepatitis C

3.1. Re-organization of structures and services

3.2. Policies for implementation and development of the plan

- o 1st Arm: Health behavior, prevention and public awareness
- o 2nd Arm: Asymptomatic screening
- o 3rd Arm: Diagnosis and treatment
- o 4th Arm: Follow-up and chronic care

Policies for implementation and development of the plan

1st Arm: Health behavior, prevention and public awareness

- Action 1: Awareness and specific actions for prevention in PWIDs, incarcerated and other high-risk groups (immigrants from high prevalence areas, prostitutes, MSM)
- Action 2: Awareness and prevention in the general population with emphasis on young people
- Action 3: Continuous education of medical/paramedical personnel working in health care services and particularly in personnel working at special units

Policies for implementation and development of the plan

2nd Arm: Asymptomatic screening

- Action 1: Programs of asymptomatic screening for the general population
- Action 2: Programs of asymptomatic screening for high-risk groups



2nd Arm -Action 1: Programs of asymptomatic screening for the general population

Target

- Increase of the proportion of diagnosed patients from 19% in 2012 to 40% in 2020 and 90% in 2030

Implementation actions

- Birth cohort screening programs for individuals born between 1945-1980
- Inclusion of anti-HCV testing in the recommendations for check-up in the target population
- Organization of one week of HCV test within the annual European HIV-Hepatitis Testing Week
- Promotion of voluntary diagnostic testing for viral hepatitis
- Confirmation of positive anti-HCV tests in reference centers

Policies for implementation and development of the plan

3rd Arm: Diagnosis and treatment

Action 1: Diagnostic protocols at primary care health services for individuals undergoing asymptomatic screening

Action 2: Secure access of appropriate number of patients at the appropriate treatment for HCV elimination

Minimum numbers of patients treated with DAAs annually

- 2015-16: 900 patients
- 2017-19: 4,700 patients
- 2020-21: 6,800 patients
- 2022-23: 6,800 patients
- 2024-30: 7,000 patients

Implementation process

- Selection of **National Coordination Committee**, which will be responsible for the organization, implementation and surveillance of National Plan actions
- Selection of **Executive Coordinator**, who will be responsible for the promotion and follow-up of the implementation and progress of the program as well as for the coordination among the different services according to the National Action Plan
- **Supervision και evaluation** of the plan by KEELPNO (Hellenic CDC), which will be responsible for:
 - the organization and implementation of the actions
 - the annual progress report per arm (and re-definition of actions if necessary)
 - the financial budget
 - the organization of an annual one day report meeting
- Analysis of budget for the implementation of the plan

Conclusions

Our National Action Plan for the management of hepatitis C reflects its priority for public health and aims to show the **importance of this disease as a public health problem** for Greece and the **significance of prompt patients' diagnosis** in order to **optimize its management and eventually achieve its elimination.**

In combination with the relevant public health actions and the negotiation process for the DAAs, this National Action Plan is a key tool for **effective health policy and optimized use of resources.**