HEPATITIS CONTROL IN ALBANIA

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Before 1990 and until 1994

- Fragmented data but still showing an increase of HbsAg in general population
  - prevalence of HbsAg: 19% -28%;
  - High rate of Acute Hepatitis B;
  - High rate of chronic Hepatitis;
  - High rate of Liver cancer;
  - Poor data about Hepatitis A;
  - No data about Hepatitis V
Before 1990 and until 1994

- Low testing rates and lack of tests
- Lack of continuous blood screening
- Lack of disposable syringes
- Lack of disinfectants and no infection control programs in hospitals
- Lack of vaccination program
- Lack of awareness
- No surveillance
IMPACT OF HIV/AIDS

Some awareness on HIV before 1990
- HIV testing of some high risk groups

Introduction of mandatory blood screening in 1991 (HIV and Hepatitis)
- First case of HIV – 1993
- Introduction of mandatory disposable syringes and needles 1992
- Initial of infection control programs 1993
Acknowledging Hepatitis B epidemic

- Data from migrants in Italy and Greece
- Documenting Hepatitis B in Albania
- Albanian seroprevalence studies
Acknowledging Hepatitis B epidemic

Data from migrants in Italy and Greece (1993 - 1997)

- **HBsAg - 19%** (Santantonio 1993)

- A study of Athens University in 500 migrants pregnant women (**HBsAg - 13.4%**, anti-HBs 53%, total anti-HBc 70.8%, anti-HBe 58.6%, **anti-HAV 96.2%**, anti-HDV 0.4%, anti-HCV 0.6% and anti-HEV 2%.

- A study from Bari University in 670 Albanian migrants (**HBsAg 13.6%**, anti HBc 62.1%, **anti HCV 0.3%**).
Acknowledging Hepatitis B epidemic

- Albanian seroprevalence studies

1) Children and adolescents (8.1 - 10.8%)

2) 1993 - 1348 individuals (HBsAg 11.7%, anti HBc 57.9%)

3) 1995 - Another study in young people (HBsAg 22.2%, anti-HBc 70.6%, HbeAg 21.1%. anti-HDV 12.7%, Anti – HAV 98.2%)

- Documenting Unspecified Viral Acute Hepatitis in Hospital Based National Surveillance System
The challenges of Hepatitis B vaccination

- 1993 – Vaccination of risk groups - health care workers (not regular)
- 1994 - 1996 - Introduction of Hepatitis B in newborns from a donation of Rotary Club International
- 1997 - 1998 – Lack of funding to maintain Hepatitis B vaccination in newborns
- 1999 – First funding of Hepatitis B vaccination from Albanian Government
- The challenge of maintaining the funding
- No guidelines about Hepatitis B vaccination in newborns
Hepatitis B 2000 - 2010

- Vaccination of all newborns within 24 hours of birth
- Vaccination of unvaccinated children and adolescents born before 1994,
- Evidence of vaccination card (including Hepatitis not only in primary school but also high school)
- Documenting Hepatitis B in HCW
- Vaccination of health care workers
Hepatitis B 2000 - 2010

- Vaccination of IDU
- Improving blood safety (changes in testing program)
- Strengthening unspecified hepatitis surveillance
- Introducing Jaundice syndrome within ALERT system
- Introducing case base Hepatitis surveillance in selected hospitals
GAVI and the Hepatitis B prevention (2001-2005)

- 2000 – GAVI application for Hepatitis B funding
- 2001 – 2005 – GAVI funding of Hepatitis B vaccines and improving of vaccination
- Introduction of AD syringes in vaccination program
- A newborn vaccination policy and guidelines
- Documenting vaccination at birth and within 24 hours
- Documenting newborn and infant Hepatitis B vaccination at every district
- Preparation of the first Hepatitis Control Plan of Action - 2003
Hepatitis B vaccination

- Since 2005 fully funded by Albanian Government

- Documenting Hepatitis B vaccination within 24 hours of newborn and infants at every commune

- Documenting Hepatitis B vaccination

- Maintain high coverage starting from 95% in every commune

- Introduction of Hepatitis B vaccines in private market
Documenting the change and the epidemic

- Seroprevalence studies in children, pregnant women, general population and health care workers

- Introduction of Hepatitis case based surveillance at main districts hospitals and Tirana University Hospital Center

- BioBSS in risk groups and general population
Districts of Hepatitis Case based Surveillance until 2010
Children 0 - 5 years old

- Seroprevalence study 2001: First document of a dramatic decrease HBsAg 1.4%, anti-HBc+: 8.5%, anti-HBs+: 71.8%

- Seroprevalence study 2008: HbsAg 0.05%, anti-HBc 2.5%, anti-HBs 92%
Children 5 -14 yers old

2001 - Children with low vaccination coverage and not vaccinated: HBsAg 3.9%, anti-HBc 22.08%, anti-HBs 18.09%

2008 – HBsAg 1.4%, anti-HBc 8.2%, anti-HBs 70.09%
Pregnant women

- 2004 – Cross sectional survey: HBsAg 6.8%

- 2008 – Random testing: HBsAg 5.4 %
Health care workers (Kondili et al. 2007 from the study of 2004)

- HBsAg, anti-HBc and anti-HCV prevalence were 8.1%, 70% and 0.6%, respectively.
- The highest (11.4%) HBsAg prevalence was observed in the youngest age group (20-30 years of age).
- High HBsAg prevalence (7.2-7.5%) was detected also in age groups above 30 years.
- The highest HBsAg prevalence (12.6%) was found in the auxiliaries.
BIO BSS 2005 , 2008

- IDU – HIV/ HEP B/ HEP C/ SYPHILIS
- ROMA POPULATION - HIV/ HEP B/ SYPHILIS
- MSM – HIV/HEP B/ SYPHILIS
<table>
<thead>
<tr>
<th>Disease</th>
<th>Sample (n=225) %</th>
<th>Estimated Population Proportion % (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>0.0%</td>
<td>NC</td>
</tr>
<tr>
<td>Hepatitis B</td>
<td>12.4%</td>
<td>14.9 (7.9%-21.3%)</td>
</tr>
<tr>
<td>Hepatitis C</td>
<td>26.7%</td>
<td>25.4% (18.5%-32.7%)</td>
</tr>
<tr>
<td>Syphilis</td>
<td>1.3%</td>
<td>0.6% (0.1%-1.4%)</td>
</tr>
</tbody>
</table>

Note: NC means CI not calculated due to small sample size.
<table>
<thead>
<tr>
<th>Condition</th>
<th>BioBSS 2005</th>
<th>Roma</th>
<th>Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV</td>
<td>0.3</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>HBsAg</td>
<td><strong>13.8</strong></td>
<td><strong>5.4</strong></td>
<td></td>
</tr>
<tr>
<td>Syphilis</td>
<td>1.9</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>Condition</td>
<td>Value</td>
<td></td>
<td></td>
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<tr>
<td>-----------------</td>
<td>----------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV</td>
<td>0.8 (0.1-2.0)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HBs Ag</td>
<td>17.6 (11 – 25.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Syphilis f</td>
<td>1.2 (0.3 - 2.3)</td>
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<td></td>
</tr>
</tbody>
</table>
Surveillance of Acute Viral Hepatitis in Albania


- Syndromic surveillance system-ALERT – Weekly mandatory reporting of “Jaundice”

- Biological Surveillance of infectious agents among individuals receiving multiple transfusions.


- Sentinel surveillance for IDU, MSM and Roma
Unspecified viral hepatitis in years.

(Incidence cases /100000)

\[ y = -5.3515x + 76.905 \]

\[ R^2 = 0.8649 \]

F-ratio=76.8

p <0.001
Comparison of Infectious syndrome “Jaundice” (ALERT) and Unspecified viral hepatitis (14Sh)
ALERT and Hepatitis A epidemics
Vaccination strategy beyond 2010

- Mandatory Vaccination at birth and infants
- Mandatory vaccination of adolescents
- Mopping up campaigns of all adolescents and youngsters (university students) all over the country (National coverage 85%)
- Mandatory vaccination of health care workers and all health sciences students
Vaccination strategy beyond 2010

- Vaccination free of charge of Roma population and MSM and other vulnerable groups near GP practices

- Mandatory vaccination of anybody undergoing dialysis and important interventions
Incidence of unspecified viral hepatitis compared to vaccination coverage (1995-2013)
Hepatitis Action Plan and profiting from HIV action plan

- Availability of testing all over the country in public health laboratories since 2010

- Promotion of testing from Voluntary Counseling and Testing Centers established in all public health directories since 2010

- Testing campaigns

- Mandatory reporting of Hepatitis A, B, C, D, E from all facilities public and private
Hepatitis Action Plan and profiting from HIV action plan

- Mandatory surveillance of polytransfusion and dialysis subjects
Preliminary data from 2011 cross sectional seroprevalence study in general population

1500 subjects all over the country – HbsAg 6.3%
Incidence of acute hepatitis B and C 2010-2013

Year | HBV cases/100,000 | HCV cases/100,000
---|---|---
2010 | 2.3 | 1.1
2011 | 3.8 | 1.1
2012 | 4.1 | 1.2
2013 | 3.9 | 1.2
Incidence of HBV by age-group 2010-2013
Incidence of HCV by age-group 2010-2013
Laboratory reporting (2013)

Privat & Public laboratories

<table>
<thead>
<tr>
<th>Location</th>
<th>HBV (%)</th>
<th>HCV (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Privat Laboratory</td>
<td>61,2</td>
<td>62,1</td>
</tr>
<tr>
<td>Public Laboratory (DPH)</td>
<td>24,1</td>
<td>17,2</td>
</tr>
<tr>
<td>Public Laboratory (hospital)</td>
<td>6</td>
<td>17,2</td>
</tr>
<tr>
<td>National centre of blood transfusion</td>
<td>8,6</td>
<td>3,4</td>
</tr>
</tbody>
</table>
Seroprevalent studies in years

2005 – prevalence of HBsAg in pregnant healthy women results **6.4%**, anti HCV **1%**.

2004-2006 - Epidemiology of hepatitis B virus infection in Albania - the HBsAg prevalence was **9.5%**

2007 - Hepatitis B virus infection in health care workers in Albania: a country still highly endemic for HBV infection, the HBsAg, and anti-HCV prevalence were **8.1%**, and **0.6%**, respectively

2009 - The prevalence of HBsAg in blood donors was 7.9%. It was increased steadily from 5.9% in 1999 to 9.1% in 2006 and decreased in 7.9% in 2009

2010 - Seroprevalent study in general population – prevalence of HBsAg was **7.2%** and antiHCV was **1.3%**.

*Albania is a country still highly endemic for HBV infection.*
Chronic hepatitis B

- Still chronic hepatitis B a burden for families and health care system Lack of continues treatment and not all reimbursed
- A study of evaluation of Chronic Hepatitis B
- Establish Surveillance of Chronic Hepatitis B in 2015
Chronic hepatitis B

- Still chronic hepatitis B a burden for families and health care system;
- Lack of continuous treatment and not all reimbursed
- A study of evaluation of Chronic Hepatitis B – ongoing
- Establish Surveillance of Chronic Hepatitis B in 2015
Hepatitis C a new burden

- Dramatic increase of Hepatitis C in risk groups

- Increase of Hepatitis C in general population (preliminary data 2.8 %)

- BioBSS/IDU 2011 - 26.5 %.

- Lack of chain of services and continuos treatment
Further action

- Review of the Hepatitis prevention strategy February 2015
- Joint actions with HIV and other screening programs
- Improving case based surveillance
- Introduction of Chronic hepatitis surveillance
- Documenting changes in Hepatitis A epidemic
Conclusions

• Strengthening of the public health laboratory capacities

• Improving sentinel surveillance in the most vulnerable groups.
Thanks

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