

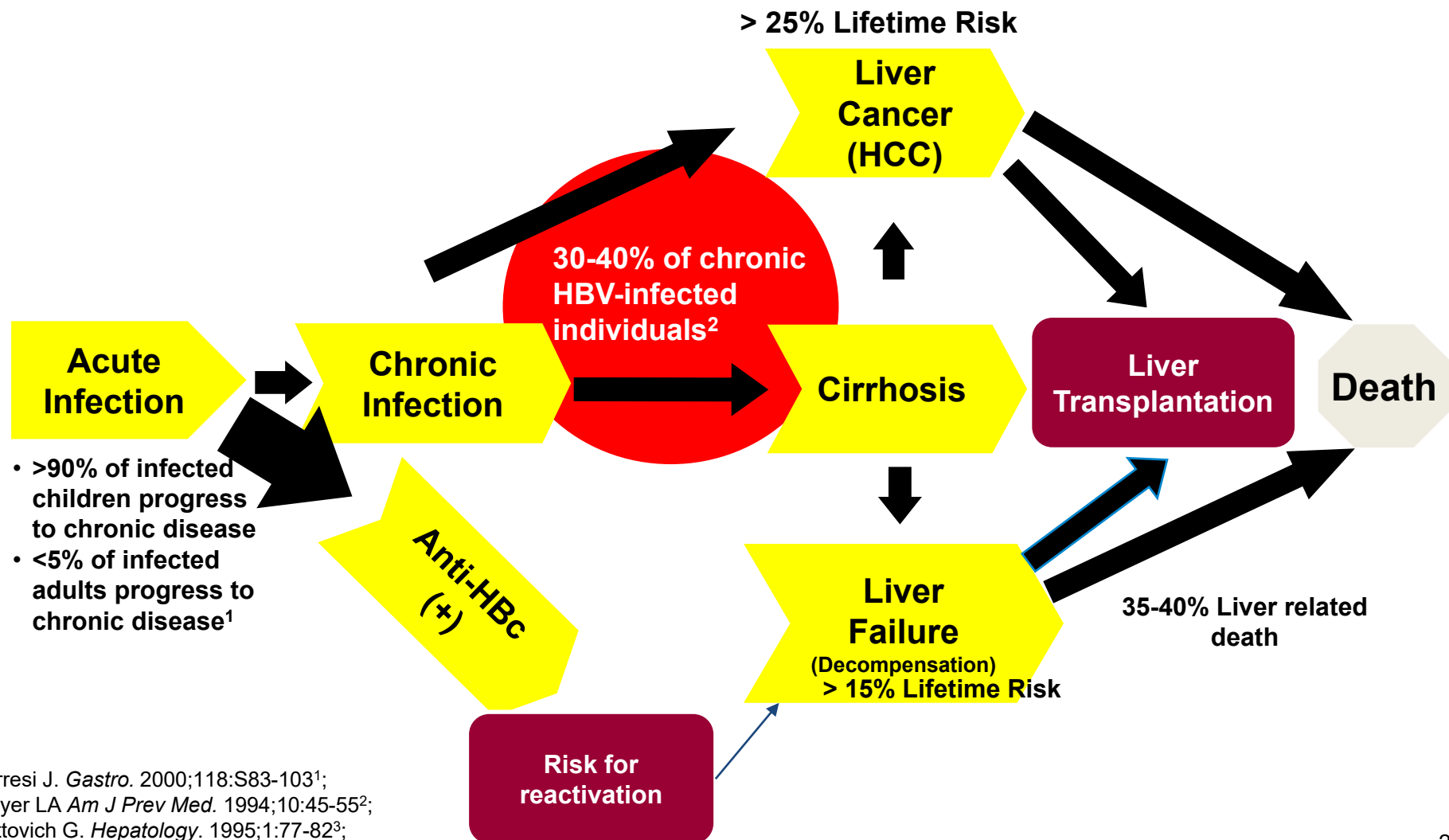
5th HEPATITIS C
TECHNICAL ADVISORY
GROUP
TAG Meeting

PROGRESS AND CHALLENGES IN HBV PREVENTION, CARE AND TREATMENT

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Clinical course and consequences of hepatitis B infection



HBV diagnostic markers

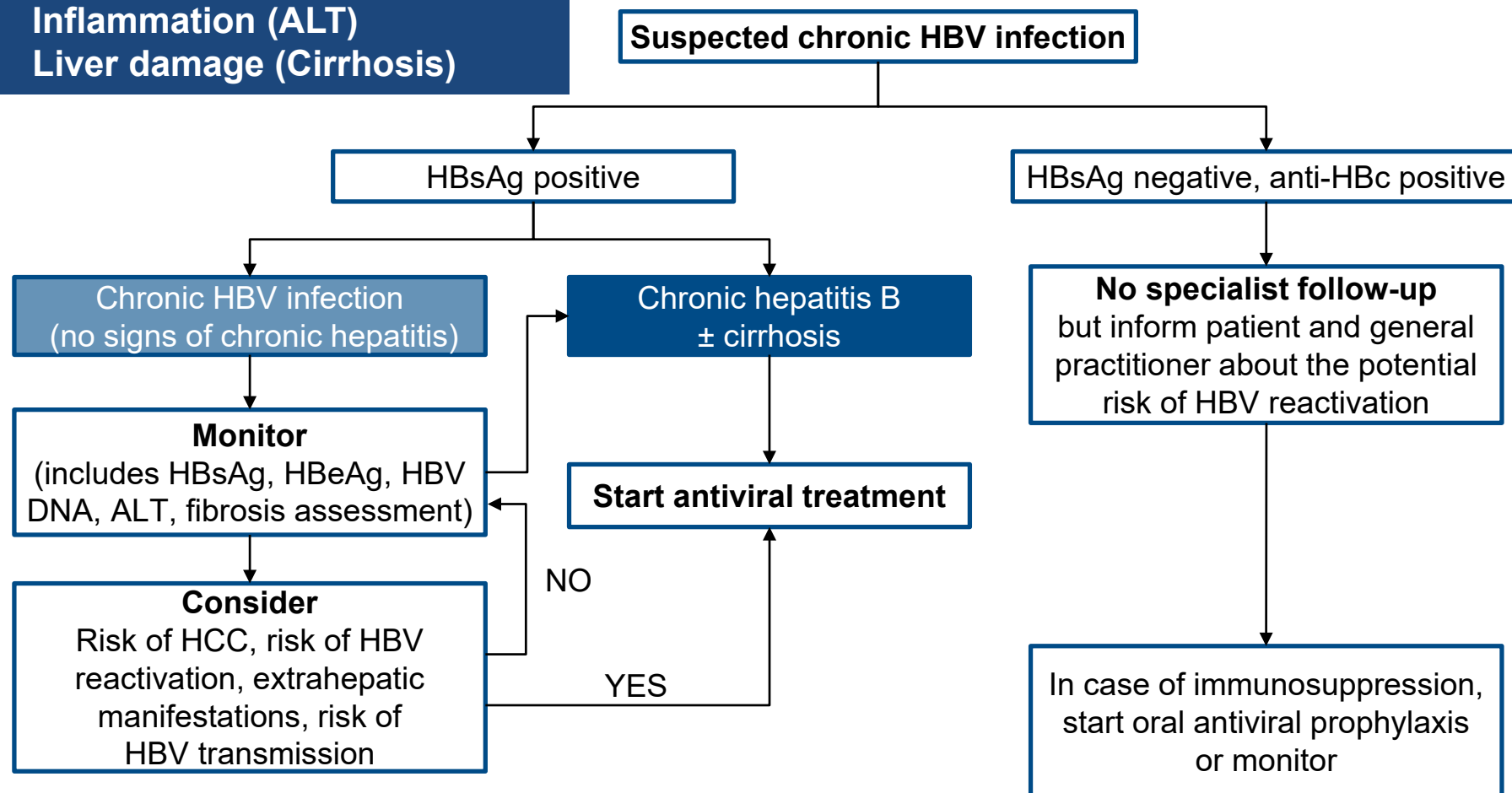
- HBsAg+ = infection
- Anti-HBc+ = exposure (does not need vaccination)
- Anti-HBs+ = immunity (if anti-HBc is negative)

HBeAg- High infectivity, HBeAb- Low infectivity

Algorithm for the management of chronic HBV infection

Treatment indication is based on:

1. Viral load (HBV DNA)
2. Inflammation (ALT)
3. Liver damage (Cirrhosis)



HBV in Georgia

- Prevalence of HBsAg positive persons - 2.9%
- Prevalence of anti-HBc positive persons 25.5%
 - ≈ 80 000 chronic HBV infection
 - ≈ 20 000 – 30 000 at risk of liver cirrhosis and/or HCC
 - ≈ 700 000 person are under potential risk of HBV reactivation
- Incidence of HBV infection per 100 000 population - 38.6 (2018)
 - 5.5 in 30 EU countries (2016)
- Prevalence of HBV infection in pregnant women – 2.5% (2013)
- Prevalence of HBV infection in healthcare workers - 2% (2012)

Ana Kasradze et al, NCDC Tbilisi, Georgia

M. Butsashvili, G. Kamkamidze, et. Al. Occupational Medicine, Oxford Journal, 2012 Aug 6.

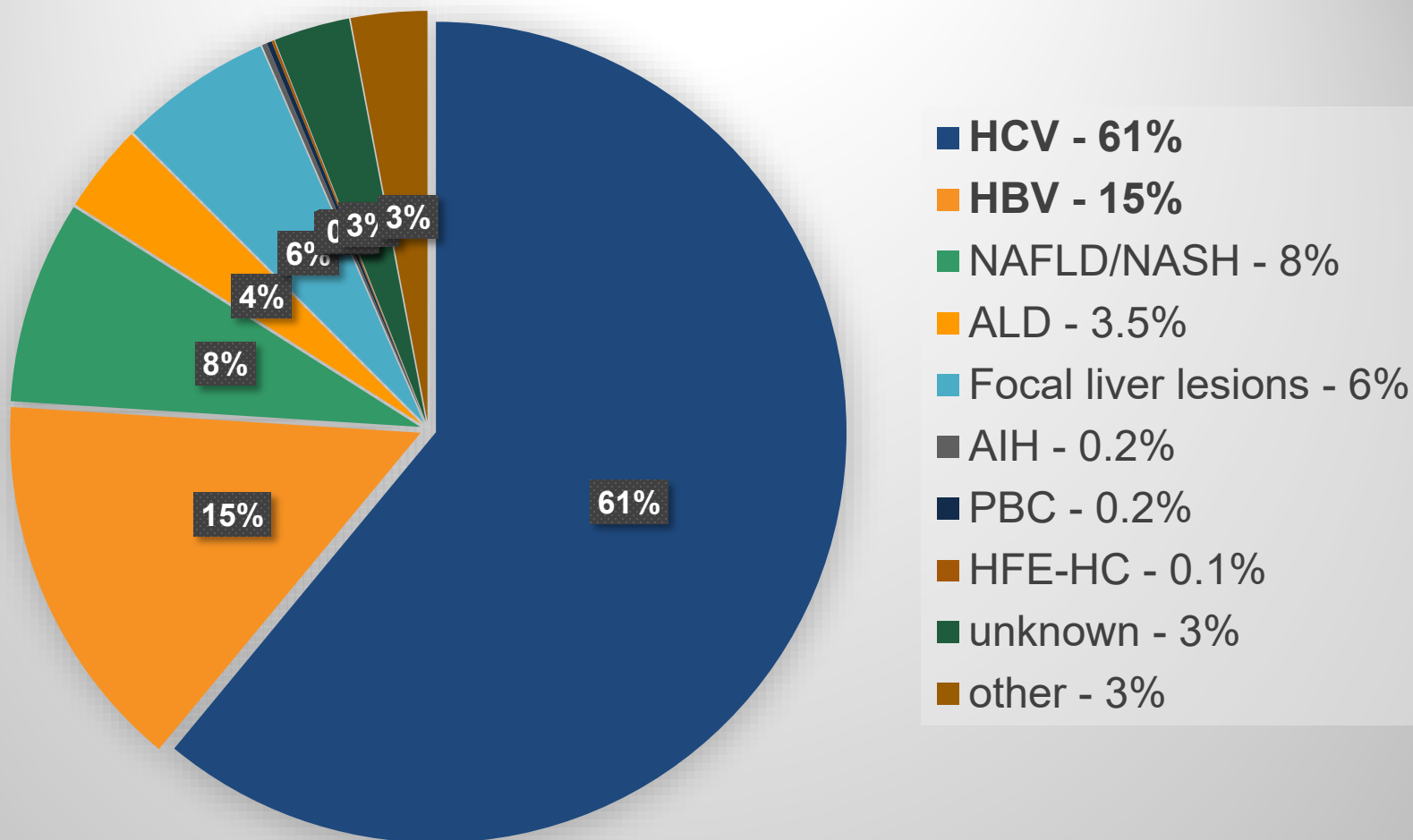
D. Metreveli et al. World Congress of Pathology and Laboratory Medicine, Istanbul, Turkey, 2005 Poster 3-198

ECDC Annual Epidemiological Report for 2016

Etiological variety of liver diseases

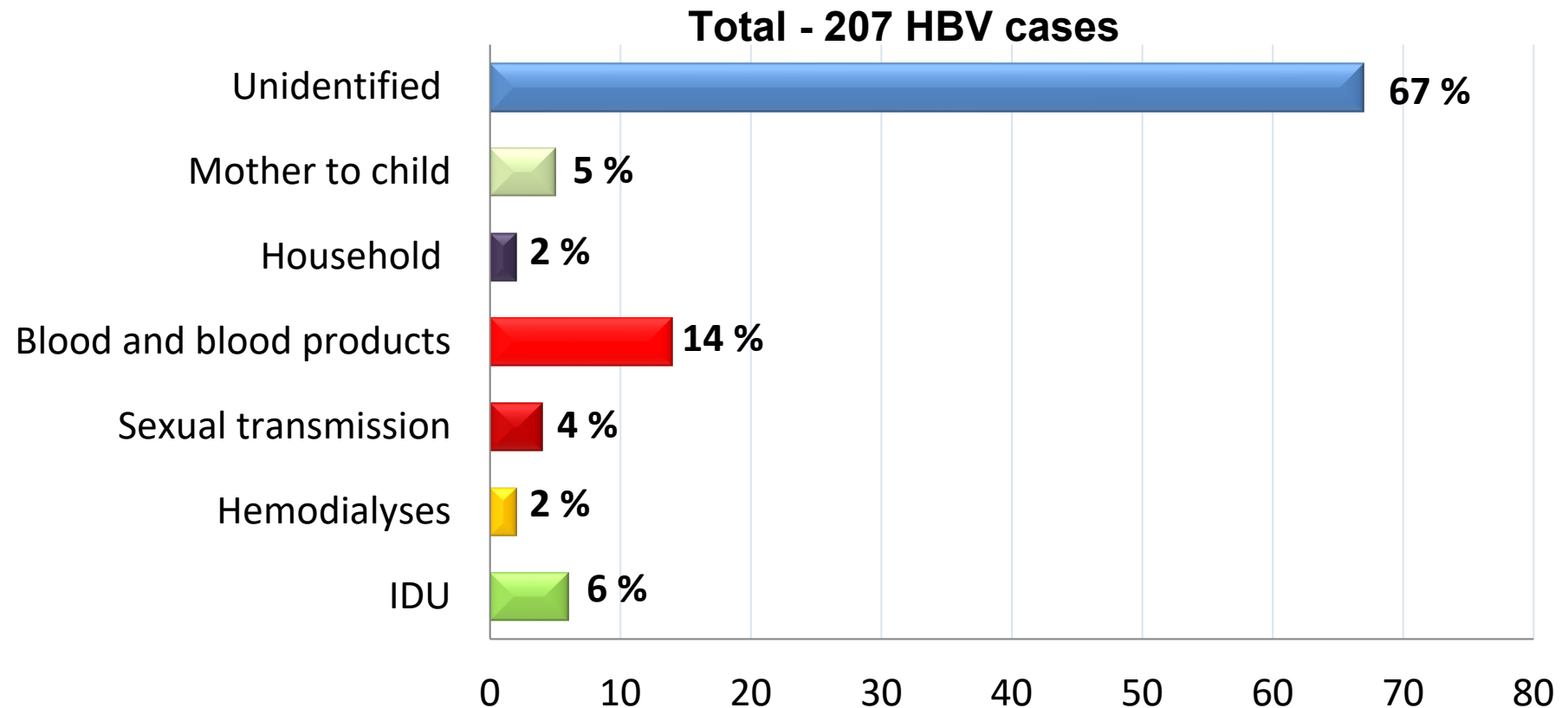
(Data of Medical Center Mrcheveli during 05.2012-05.2014)

Total 1413 patients, 207-HBV



HBV transmission

The main mode of HBV transmission is unknown in Georgia





Clinical management of HBV infection in Georgia (Our experience)

HBV management flowchart (based on our own experience)

HBsAg+, baseline evaluation (Basic)

- LFTs, CBC, Alb., Gluc., Creat., PT/INR
- Abdominal US, Fibroscan
- HBeAg, Anti-HDV

≈120 USD

HBsAg+, baseline evaluation (Extended)

- HBV-DNA

≈80 USD

HBsAg+, baseline evaluation (Advance)

- CT/MRI, endoscopy, biopsy etc.

>200 USD

Monitoring (Basic – once a year)

- LFTs, CBC, Alb., Gluc., Creat., PT/INR, HBeAg
- Abdominal US +/- Fibroscan

≈100 USD

Monitoring (Advance – every 6 month)

- LFTs, CBC, Alb., Gluc., Creat., PT/INR, HBeAg
- Abdominal US, Fibroscan
- HBV-DNA

≈180 USD

Antiviral treatment

Tenofovir (TDF, Viread)

≈35 USD (420 per/y)

Management of chronic HBV infection

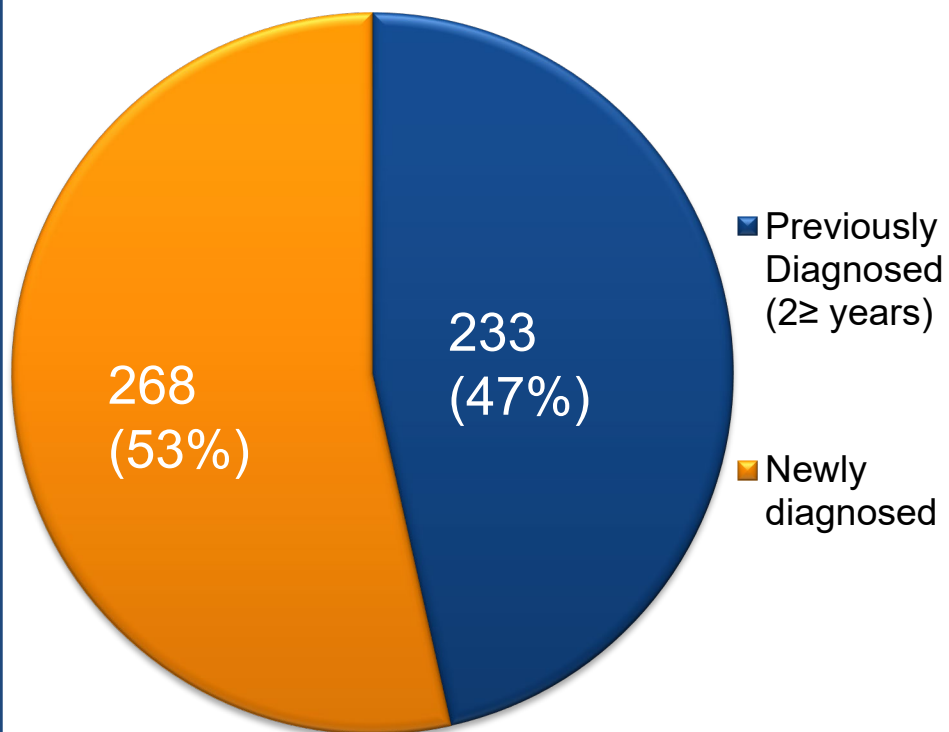
(Data of Medical Center Mrcheveli - 05.2012-12.2017)

- Chronic HBV (N=501) (Mostly - HBeAg negative; genotype - D.)
- HBV/HDV co-infection 6%
- 61% Male
- 12% had cirrhosis
- 3% came with / or developed HCC

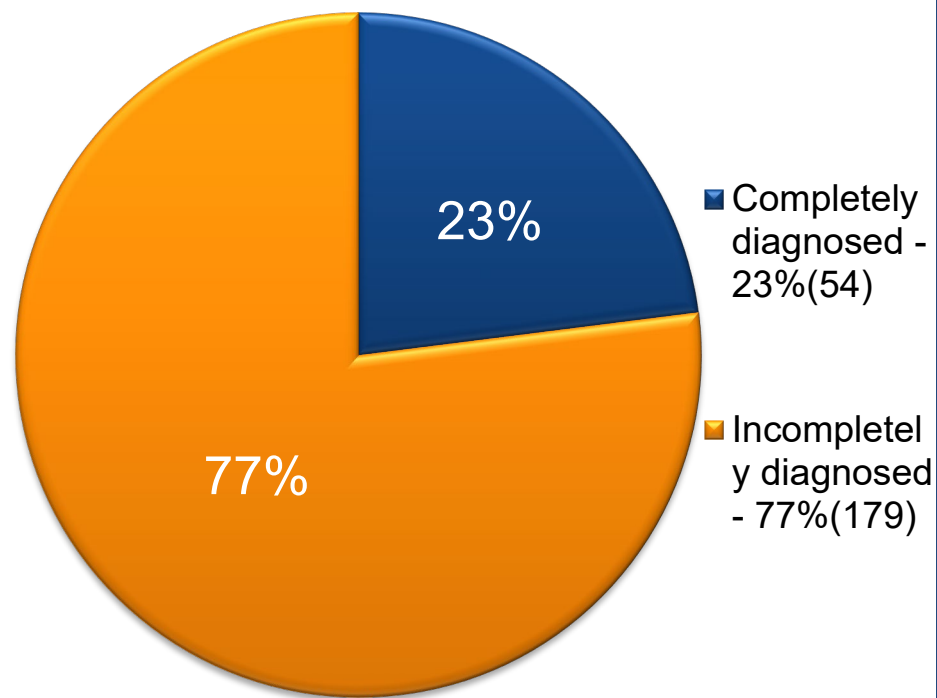
Management of chronic HBV infection

(Data of Medical Center Mrcheveli - 05.2012-12.2017)

Chronic HBV Infection - 501 persons



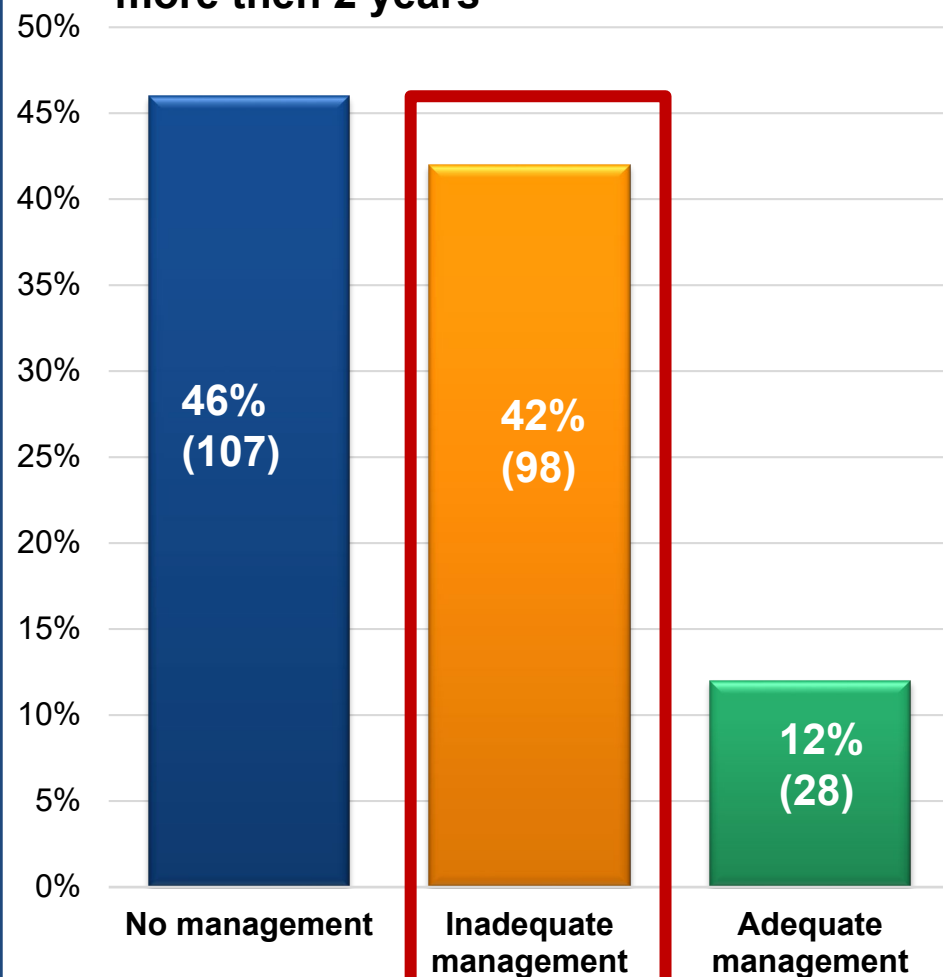
Total 233 HBV persons previously diagnosed (2≥ years)



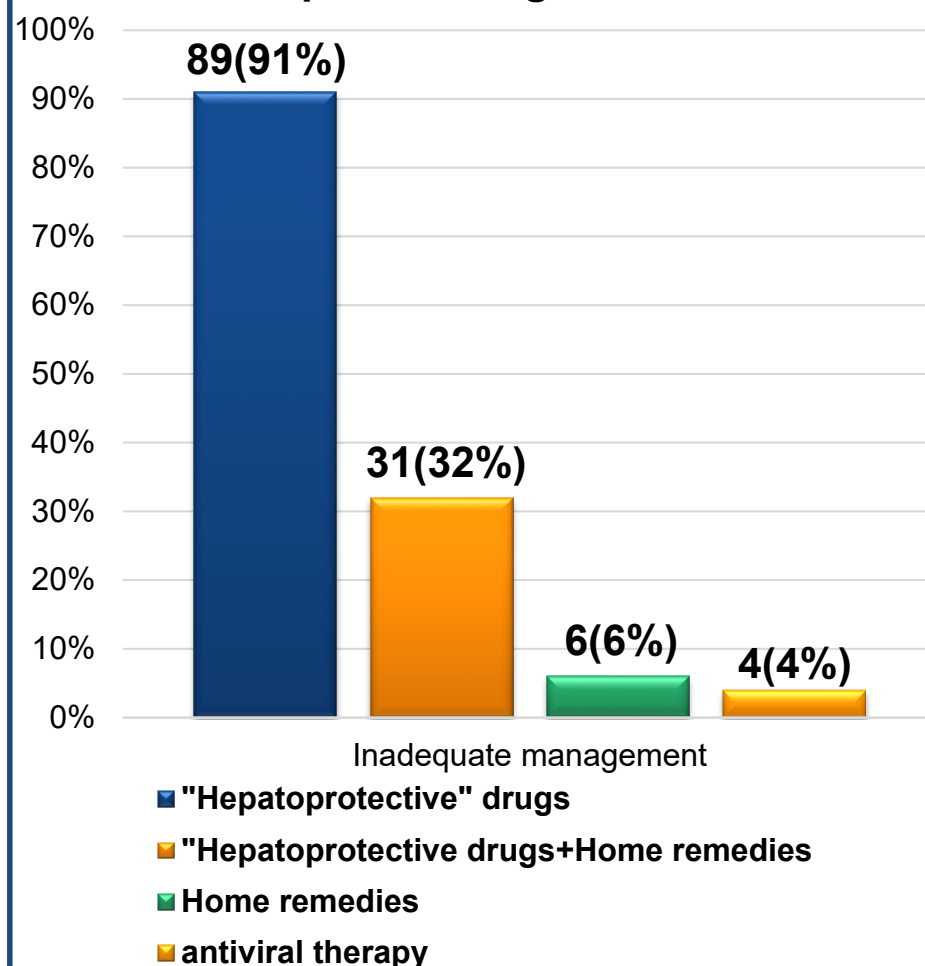
Management of chronic HBV infection

(Data of Medical Center Mrcheveli - 05.2012-12.2017)

233 chronic HBV patients, diagnosed more then 2 years



98 HBV infection persons with inadequate management





Progress and Challenges in HBV:

Screening

Management

Prevention

Screening of HBV Infection in Georgia

Progress/Achievements:

- Mandatory screening of blood/organ/tissue donors - since 1997
- Mandatory screening of all military recruits - since 2006
- Mandatory screening of the pregnant women - since 2008
- Mandatory screening within HCV Elimination – since 2015
- Mandatory screening of all hospitalized patients - since 2016
- Mandatory screening of all health care workers - since 2019

Screening of HBV Infection in Georgia

Challenges/Problems:

- In most of the programs screening is done by Rapid tests (Not by enzyme immunoassays)
- There is no mandatory screening of high risk groups: IDUs, MSMs, immunosuppressed patients etc.
- Screening does not include Anti-HBc – especially in patients undergoing chemo- or immunosuppressive therapy
- Very low awareness about HBV and therefore very low HBV screening rate in general population (especially in the regions)

Management of chronic HBV infection

Progress/Achievements:

- All diagnostic tools are available:
 - Full lab diagnostics, imaging, fibrosis assessment tools, liver biopsy (with support of international partnership)
- First line antiviral drug is available on the market
 - Tenofovir (TDF)
- There are number of qualified specialists

Management of chronic HBV infection

Challenges/Problems:

- Financial support:
 - Complete diagnostics – No support
 - Monitoring – No support
 - Antiviral treatment – No support
- Non-compliance to standardized international HBV management guidelines by the specialists
- Low awareness about HBV management among other specialists
 - In patients undergoing chemo- or immunosuppressive therapy – anti HBV prophylaxis is very rare

Management of chronic HBV infection

Limitations of linkage to care:

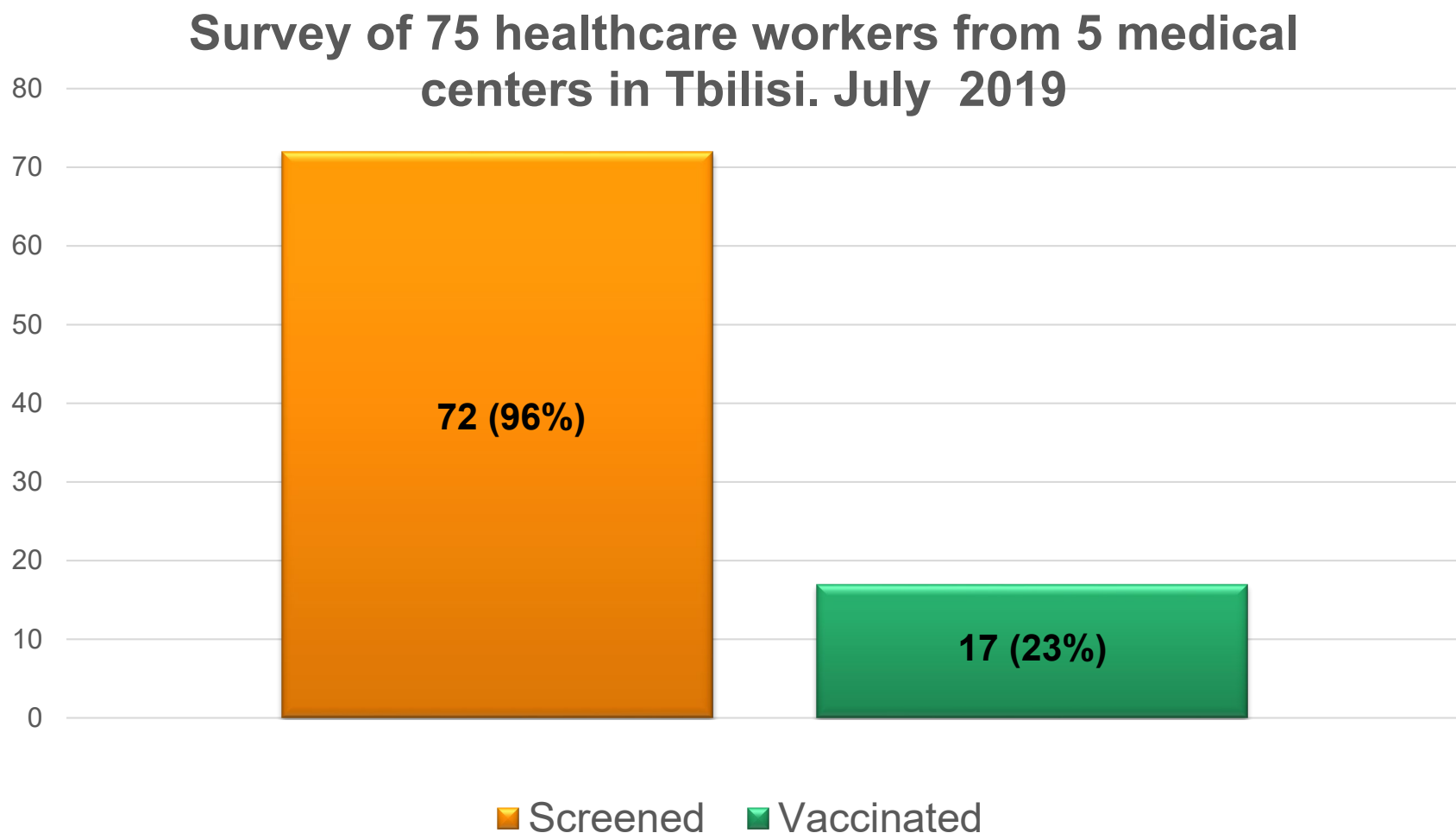
- Inability to cure
- Lifelong therapy in most cases
- Low socio-economic status of population
- “self-treatment” (“hepatoprotectors”, home remedies, herbal drugs)
- Lack of educational programs for both patients and physicians
- No financial support for diagnostics, treatment and monitoring on the part of both private insurance companies and universal health care program

Prevention of HBV Infection in Georgia

Progress/Achievements:

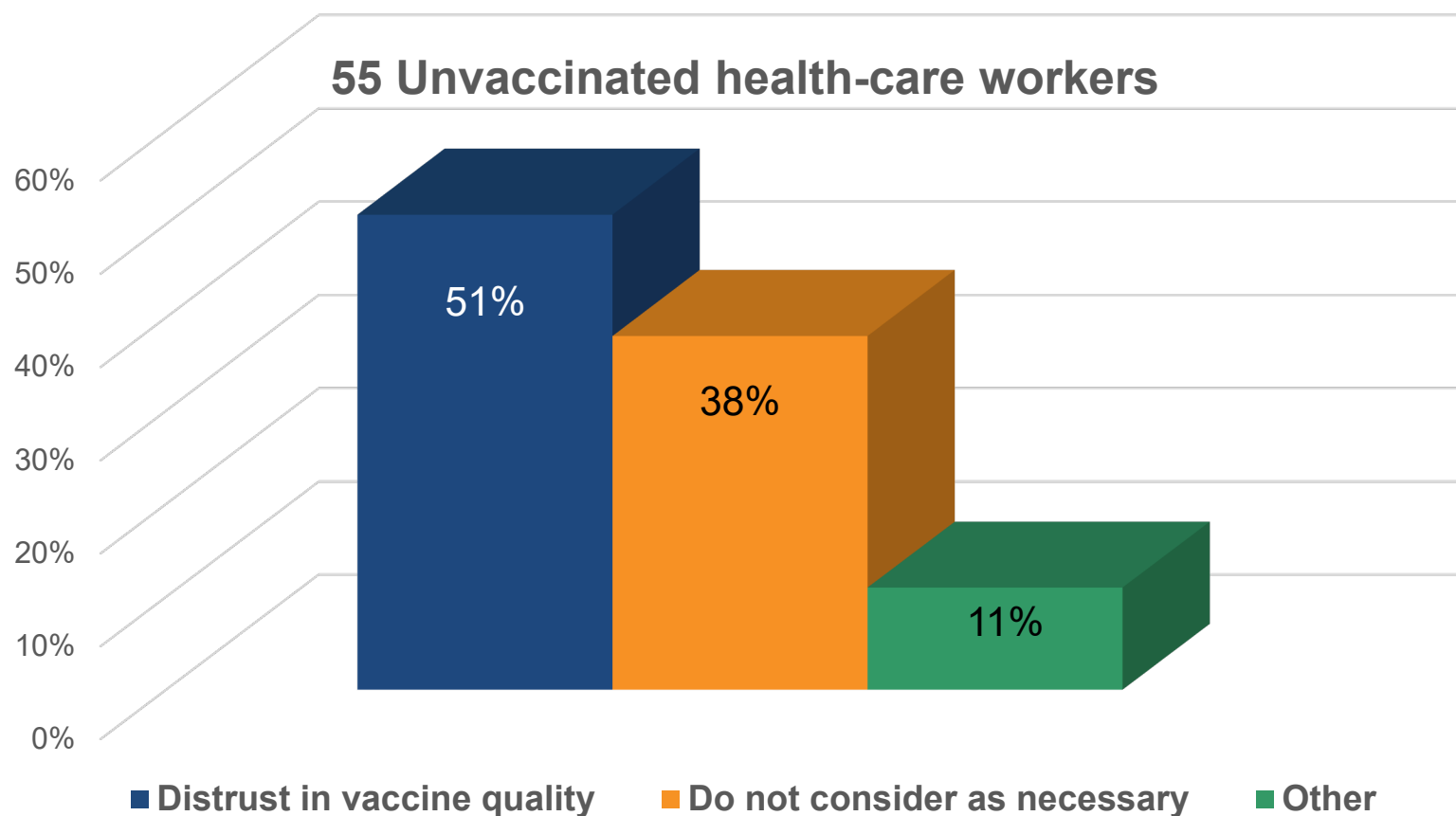
- Routine vaccination of newborns - since 2002
- HB IG shots to the newborns from HBsAg positive mothers – routinely since 2007
- Vaccination of all HCV positive, anti-HBc negative persons within hepatitis C elimination program - since 2017
- Compulsory vaccination of All medical personnel who are in contact with patients - since 2019

Prevention of HBV Infection in Georgia



Prevention of HBV Infection in Georgia

Reasons for Refusing Vaccination in Healthcare Workers



Prevention of HBV Infection in Georgia

Challenges/Problems:

- Insufficient awareness about HBV vaccination
- The vast majority of the population (born before 2002) – are not vaccinated.
- Routine HBV vaccination in high risk groups including healthcare workers – remains rare
- Insufficient infection control within healthcare/non-healthcare facilities remains a risk factor of HBV transmission

Conclusion

To solve the existing problems needs different vision, special focus on education, new projects, more effort and commitment from Government, NCDC and professional associations



Georgian
Hepatology
Association



Armenian Association
for the Study of the Liver

The 2nd Transcaucasus Symposium on HBV Infection

27-28 September, 2019

Courtyard Marriot Tbilisi, Georgia



Thank you for your attention!