

Dünyada ve Türkiyede Hepatit B ve Hepatit C Epidemiyolojisi

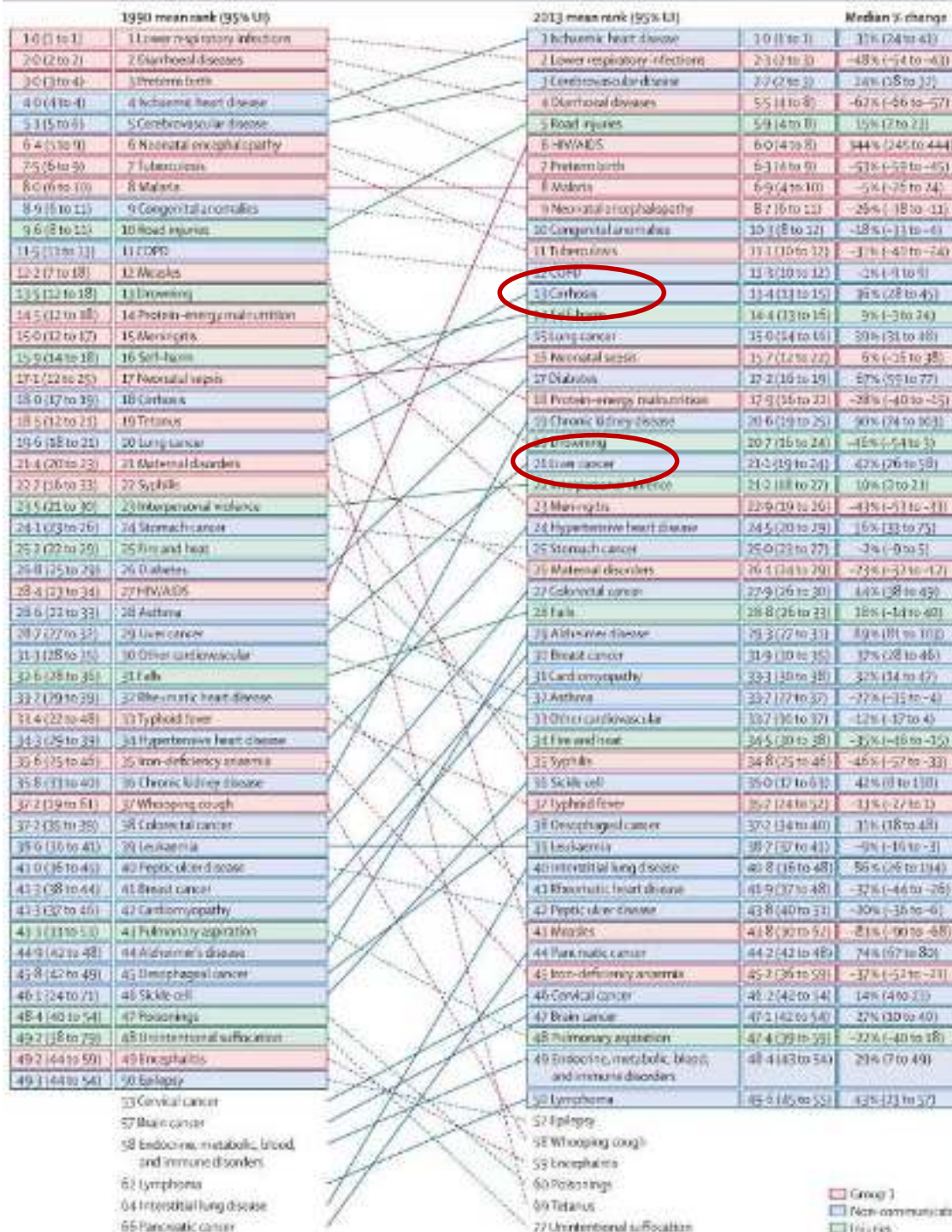
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Yeditepe Üniversitesi Hastanesi

EKMUD İstanbul Günleri 1 Mart 2016

Kronik hepatit B ve C

- Kronik hepatit B ve C dünyada önemli halk sađlığı problemi olmaya devam etmektedir.
- Hepatit B virüsüne karşı etkili bir aşı ve etkili antiviral tedavi olmasına rağmen endemik özelliđi devam etmektedir.
- Aşısı olmayan Hepatit C prevalansında artış olmaktadır.



Global, regional, and national age-sex specific all-cause and cause-specific mortality for 240 causes of death, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013

Lancet 2015; 385: 117–71

Kronik HBV infeksiyonu

- Kronik HBV infeksiyonu gelişme riski yaşla değişip perinatal dönem-6 ay % 90 iken, 6 ay-5 yaş arası %20-60 e geriler.
- Çocuklukta HBV ile infekte olan çocukların % 25 inde primer karaciğer kanseri ve siroz gelişir.
- Son zamanlarda yapılan global hastalık değerlendirmesi kronik hepatit B ile yüksek morbidite ve mortaliteyi göstermiştir.

Kronik HBV infeksiyonu

- 2014 de yapılan 67. Dünya Saęlık Kurulunda DSÖ viral hepatit önleme ve kontrolünde tanı, tedavi ve tedavi izlemenin öneminin altı çizilmiştir.
- Her ülkenin ulusal epidemiyolojik bilgi toplamasının strateji geliştirme ve hastalığı kontrol etmede önemi vurgulanmıştır.

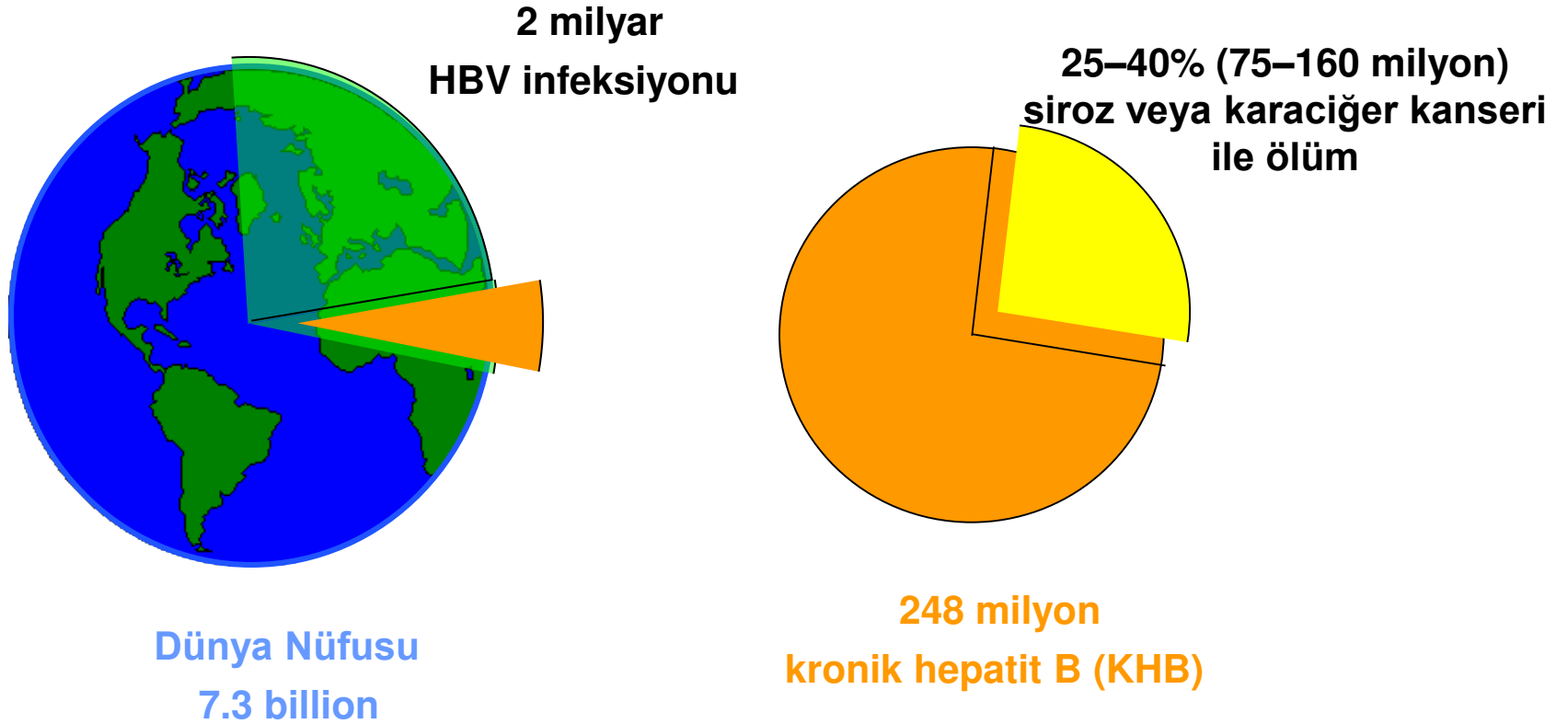
Kronik HBV enfeksiyonu

- 2010 da yapılan global sistematik derleme; dünyada genel toplumda yaklaşık 248 milyon kronik HBV enfekte kiři olduğunu göstermiştir.

Estimations of worldwide prevalence of chronic hepatitis B virus infection: a systematic review of data published between 1965 and 2013.

Schweitzer A, et al. Lancet 2015; 386: 1546–55.

Global impact of hepatitis B



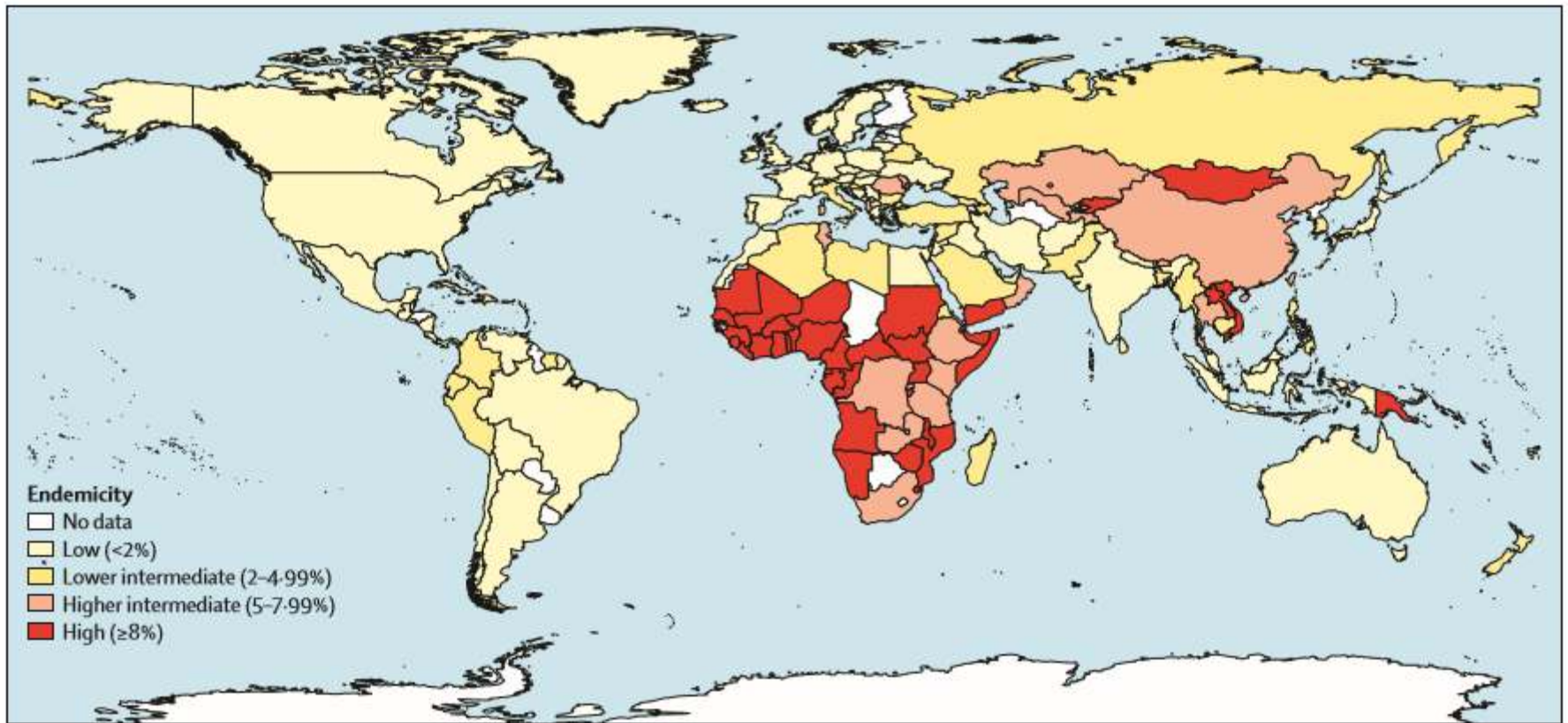


Figure 2: Global HBsAg endemicity (1957-2013)

Estimations of worldwide prevalence of chronic hepatitis B virus infection: a systematic review of data published between 1965 and 2013

Lancet 2015; 386: 1546-55

HBsAg seroprevalence was 3.61% worldwide In 2010, about 248 million individuals were HBsAg positive globally

WHO regions	prevalence estimated(%)
African Region	8.83
The Americas	0.81
Eastern Mediterranean Region	3.01
European Region	2.06
South East Asian Region	1.90
Western Pacific Region	5.26

Based on a systematic review of data published between 1965 and 2013

HBsAg prevalence in the general population in the WHO European Region (2.06%)

The prevalence of chronic HBV infection	WHO European Region
High (>8%)	Kyrgyzstan
Intermediate (2–8%)	Albania, Azerbaijan, Belarus, Bulgaria, Cyprus, Georgia, Italy, Kazakhstan, Kosovo, Moldova, Romania, Russia, Tajikistan, Turkey, Uzbekistan
Low (<2%)	Austria, Belgium, Bosnia and Herzegovina, Croatia, Czech Republic, Denmark, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Lithuania, Netherlands, Norway, Poland, Portugal, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Ukraine, UK

Schweitzer A, et al. LANCET 2015.

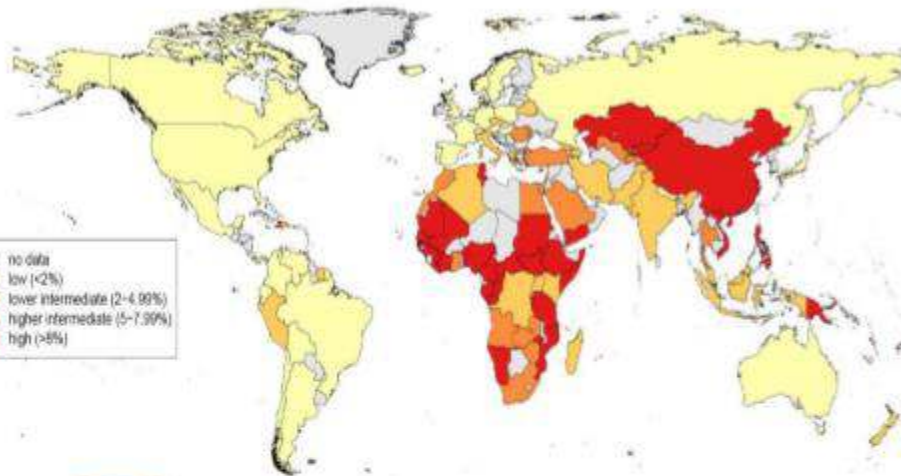
	Number of studies	Number of participants	Prevalence estimates (%, 95% CI)	Population size per country	HbSAg-positive population
Albania	8	48 758	7.79% (7.56-8.03)	3 150 143	245 509
Austria	3	1 786	1.23% (0.81-1.86)	8 401 924	103 495
Azerbaijan	1	576	2.78% (1.71-4.49)	9 094 718	252 631
Belarus	1	10 156	4.60% (4.21-5.02)	9 491 070	436 425
Belgium	2	3 984	0.68% (0.47-0.99)	10 941 288	74 150
Bosnia and Herzegovina	2	8 942	1.11% (0.91-1.35)	3 845 929	42 580
Bulgaria	1	2 221	3.92% (3.19-4.81)	7 389 175	289 445
Croatia	4	13 531	1.11% (0.95-1.30)	4 338 027	48 090
Cyprus	2	9 364	2.69% (2.38-3.04)	1 103 685	29 702
Czech Republic	4	5 582	1.24% (0.98-1.56)	10 553 701	130 456
Denmark	12	198 941	0.91% (0.87-0.95)	5 550 959	50 336
France	33	1 412 054	0.26% (0.25-0.27)	63 230 866	165 728
Georgia	5	4 807	2.64% (2.22-3.14)	4 388 674	115 948
Germany	20	105 027	0.70% (0.65-0.76)	83 017 404	584 134
Greece	35	680 364	0.97% (0.95-1.00)	11 109 999	108 150
Hungary	4	35 511	0.53% (0.46-0.61)	10 014 633	53 301
Iceland	1	1 420	0.14% (0.04-0.56)	318 042	448
Ireland	1	16 222	0.03% (0.01-0.07)	4 467 561	1 377
Israel	20	445 427	0.96% (0.93-0.99)	7 420 368	71 184
Italy	70	1 980 899	2.52% (2.49-2.54)	60 508 978	1 522 546
Kazakhstan	2	430	6.05% (4.15-8.73)	15 921 127	962 673
Kosovo*	2	71 540	4.17% (4.03-4.32)	NA	NA
Kyrgyzstan	1	979	10.32% (8.56-12.38)	5 334 223	550 313
Lithuania	2	26 710	1.70% (1.55-1.86)	3 068 457	52 156
Netherlands	10	1 717 081	0.40% (0.39-0.41)	16 615 243	67 009
Norway	4	33 085	0.01% (0.00-0.03)	4 891 251	444
Poland	9	5 145 391	0.42% (0.42-0.43)	38 198 754	161 016
Portugal	3	5 610	1.02% (0.78-1.31)	10 589 792	107 597
Moldova	3	4 976	7.38% (6.68-8.14)	3 573 024	263 525
Romania	21	152 651	5.61% (5.50-5.73)	21 861 476	1 226 898
Russia	19	104 353	2.73% (2.64-2.83)	143 617 913	3 926 499
Serbia	2	52 755	0.48% (0.43-0.55)	9 647 109	46 631
Slovakia	1	59 279	1.74% (1.64-1.85)	5 433 437	94 500
Slovenia	1	207 697	0.28% (0.25-0.30)	2 054 232	5 657
Spain	49	2 602 51	0.34% (0.32-0.37)	46 182 038	158 287
Sweden	6	15 523	0.59% (0.48-0.73)	9 382 297	55 606
Switzerland	3	5 999	0.18% (0.10-0.33)	7 830 534	14 358
Tajikistan	1	708	7.20% (5.52-9.36)	7 627 326	549 426
Turkey	73	7 527 924	4.00% (3.99-4.02)	77 137 546	2 887 888
Ukraine	1	35 94	1.45% (1.10-1.89)	46 050 220	666 280
UK	22	31 762 297	0.01% (0.01-0.01)	62 066 350	3 300
Uzbekistan	3	9 903	6.99% (6.50-7.51)	27 769 270	1 940 456
Total	467	52 154 308	2.06% (2.06-2.06)	898 605 916	18 486 179

Countries in European Region where no eligible reports on HBV reporting HbSAg were available were: Andorra, Armenia, Finland, Latvia, Lithuania, Luxembourg, Malta, Monaco, Montenegro, San Marino, Macedonia, and Turkmenistan. *We restricted estimation of HbSAg carriers to both WHO Member States and countries with available population data as provided by the UN Population Division; therefore Kosovo was not included in the calculation of the total number of people living with chronic HBV.

Table 4: HbSAg seroprevalence and the number of people living with chronic HBV in the general population in the WHO European Region

Dünyada endemisine deęişikliği

1957-1989

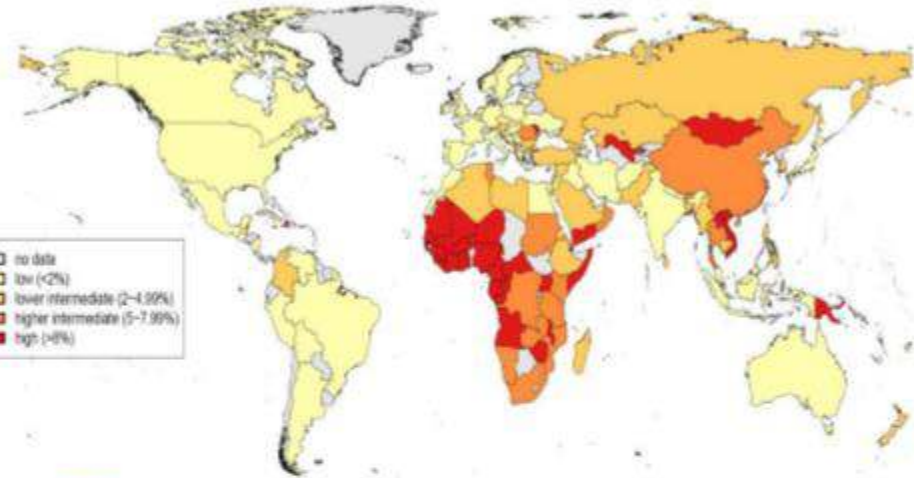


- no data
- low (<2%)
- lower intermediate (2-4.99%)
- higher intermediate (5-7.99%)
- high (>8%)

1%

Global coverage of infants in with three doses of hepatitis B vaccine in **1990**

1990-2013



- no data
- low (<2%)
- lower intermediate (2-4.99%)
- higher intermediate (5-7.99%)
- high (>8%)

82%

Global coverage of infants in with three doses of hepatitis B vaccine in **2014**

Schweitzer A, et al. . LANCET 2015.

WHO. Global Immunization Data, July 2015

http://www.who.int/immunization/monitoring_surveillance/Global_Immunization_Data.pdf?ua=1

FIGURE 1
Notification rates for acute hepatitis B (1990–2012) and percentage of infants vaccinated with three doses of hepatitis B virus antigen (1999–2012), Turkey

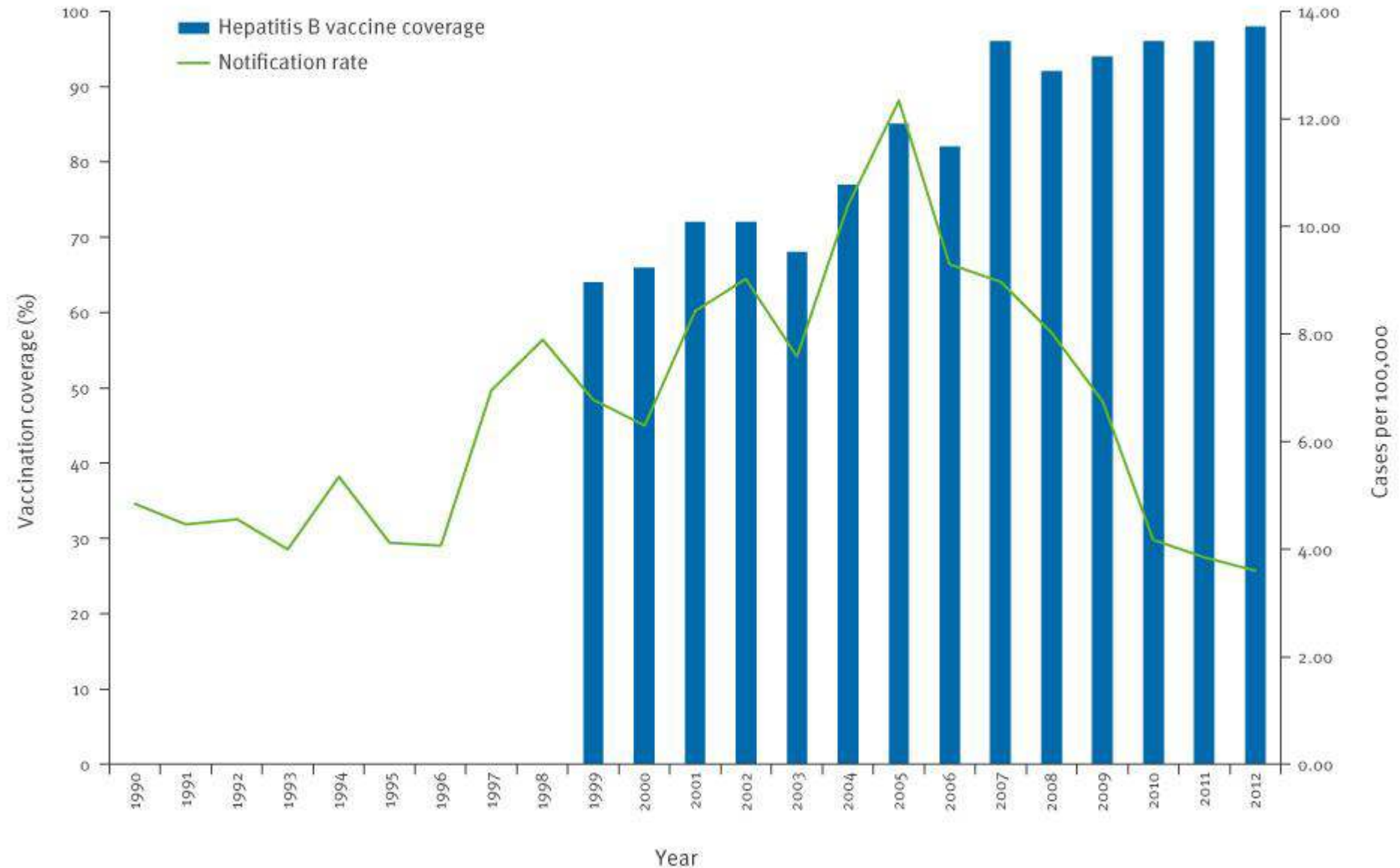


FIGURE 2

Notification rates for acute hepatitis B by age group, Turkey, 1997-2012

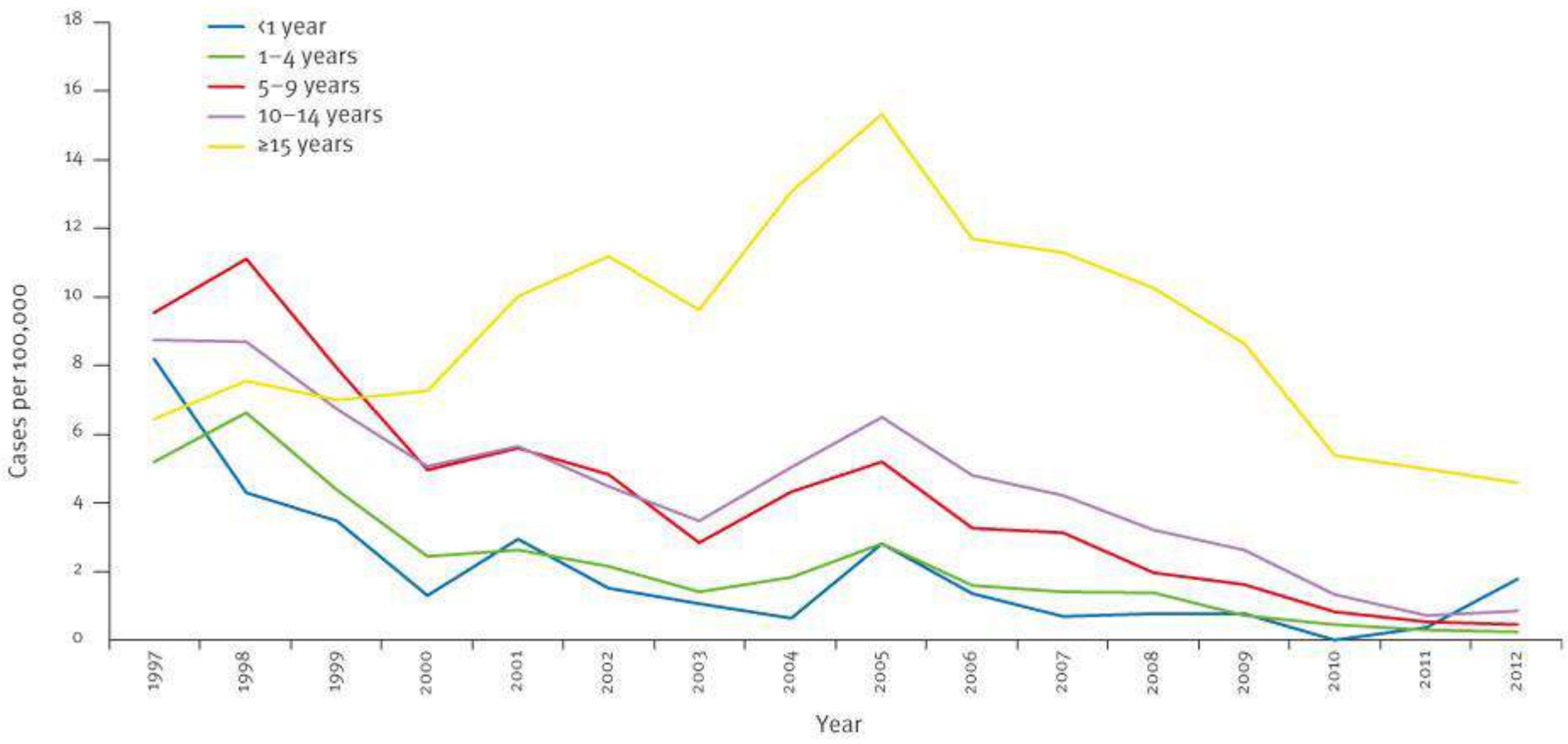
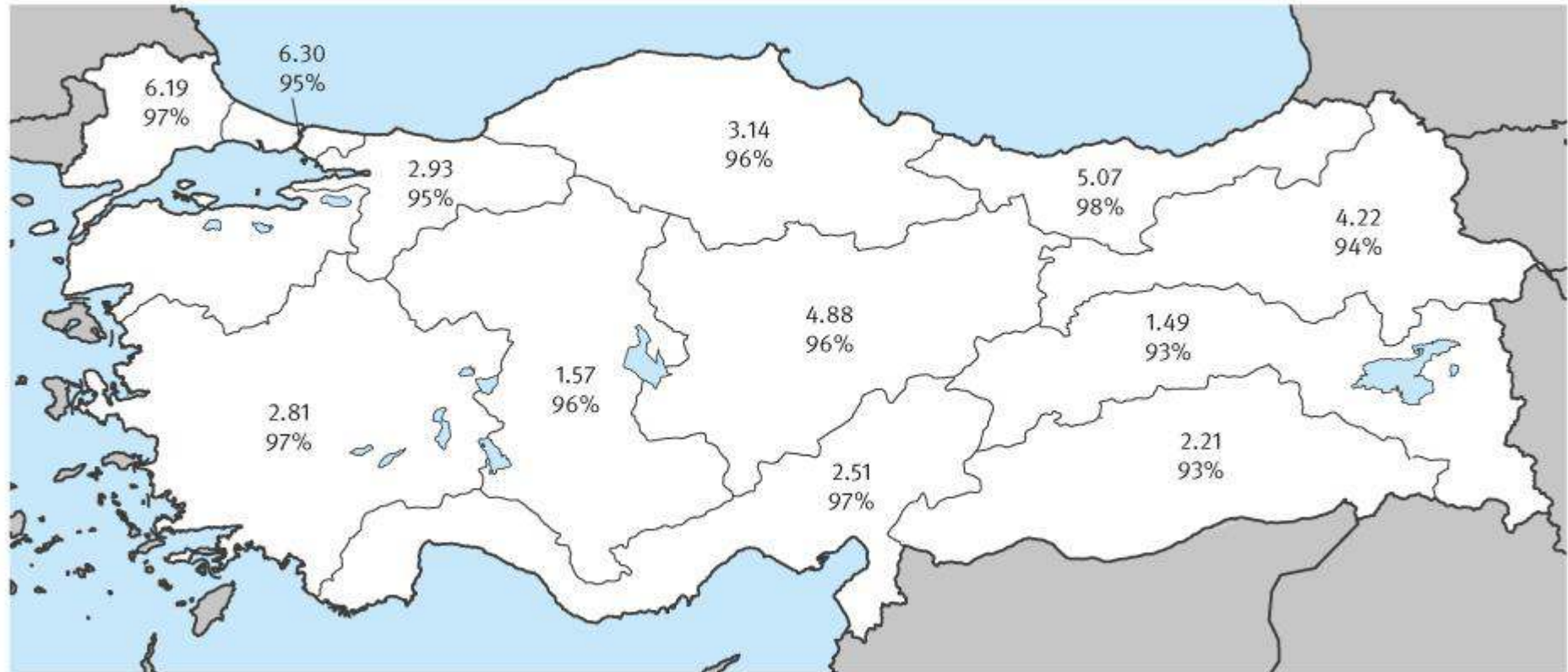


FIGURE 4

Notification rates for acute hepatitis B cases per 100,000 and percentage of infants vaccinated with three doses of hepatitis B virus antigen, by region, Turkey, 2012



Source: Kartenwerkstatt; <http://commons.wikimedia.org>

Türkiye'de Hepatit B bildirimi

- Ülkemizde 2008 - 2012, akut hepatit B bildirimi 100,000 de 8.0 ve 3.6 olmuştur.
- Avrupa'da (27 Avrupa Birliği üyesi Ülke ve 3 Ekonomik Bölge Ülkesi), akut hepatit B bildirimi 2010 yılında 100,000 de 0.8 dir.

Türkiye'de Hepatit B bildirimi

- En etkileyici azalma 15 yaş altı çocuklarda görülmüştür.
- Aşı ve yakalama stratejilerinin etkinliğini göstermiştir.

Türkiye'de Hepatit B

- Türkiye hepatit B için orta endemik ülkeler arasındadır ve yaklaşık toplumun % 4 ü HBsAg- pozitifdir.
- Hepatit B önleme için alınan önlemler;
 - 1998 de ulusal aşı programına hepatit B aşılama konulması ve bebeklerin 3 doz aşılması
 - Yüksek risk grubu aşılması ve tarama önlemleri

Genel toplumda HBV ve HCV prevalansı ve subgrup taraması

- Kan bađışçıları
- Gebeler
- IV ilaç bađımlıları
- Erkek eřcinseller
- Gçmenler

Hepatit C

Hepatitis C prevalence in Turkey: estimation through meta-analysis

Ilayda Arjen Kara

MG Çeldir, IA Kara, SB Coşkuner, B Keskin, MU Küçükler, HS Orer, O Ergönül

European Journal of Public Health, Vol. 24, Supplement 2, 2014

- 246 tam metin yayın derlemesi (6 genel toplumda)
- Türkiye'de HCV seroprevalansı %1.6

**Burden and Prevention of Viral Hepatitis
in Turkey
Istanbul, Turkey, November 12-13, 2009**

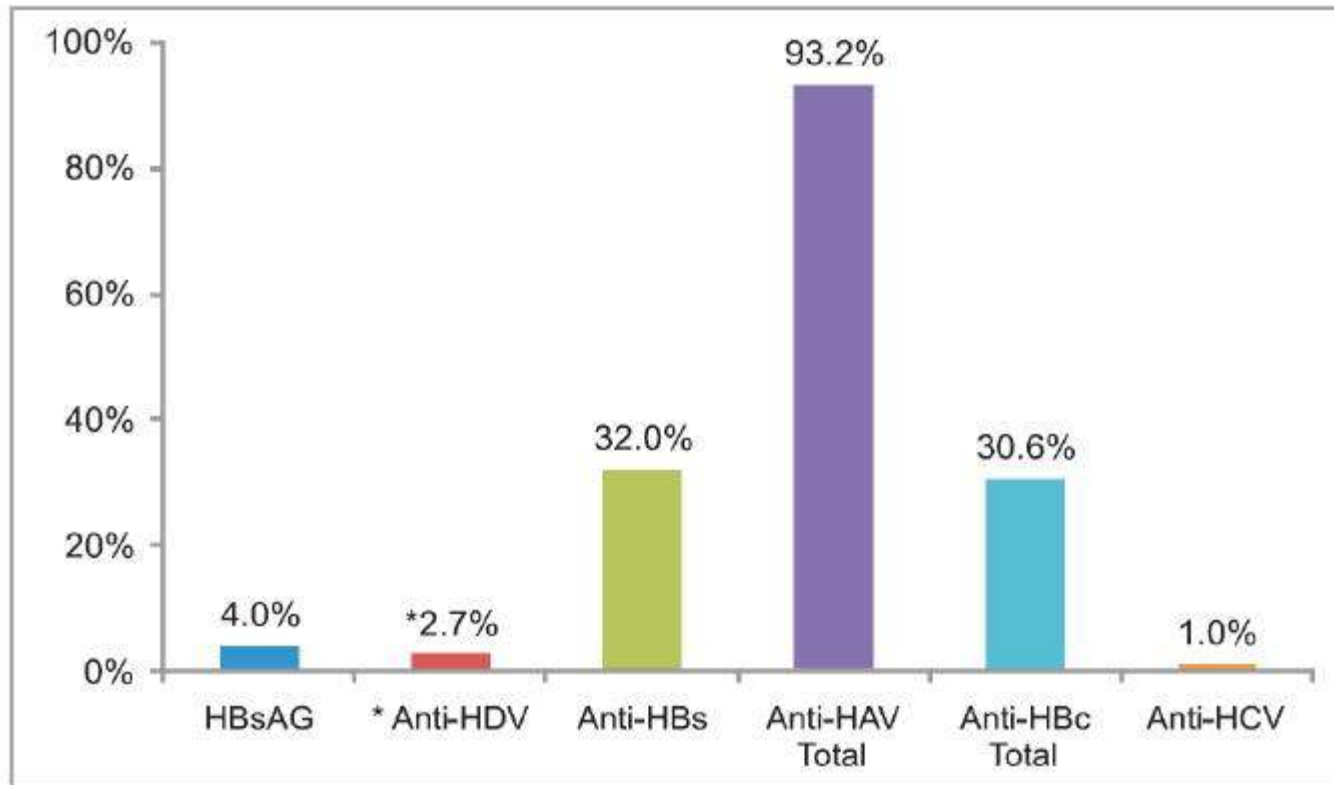
Viral hepatitis surveillance in Turkey

Epidemiology of hepatitis C in Turkey

General population

HCV epidemiological data for the general population in Turkey are only available from studies differing in sample size and sampling methodologies. Selected field studies including people attending outpatient clinics report anti-HCV rates varying from 0.17% to 2.8%, with highest rates in the Eastern part of the country. These HCV prevalence rates in the general population are similar to other European countries but lower

Prevalence of hepatitis A,B,C,D in Turkey



* HDV in HBsAg (+) cases

Dünya'da hepatitis C

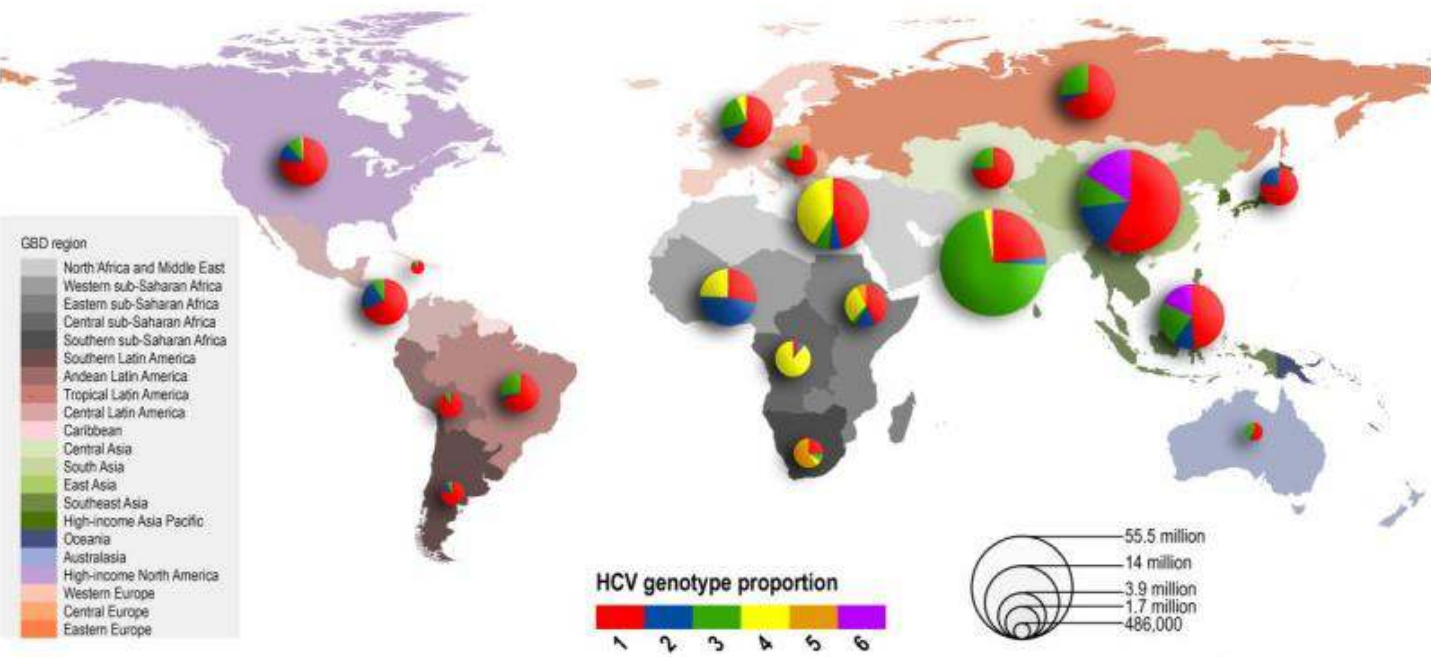
- Dünyada hepatit C seroprevalansı artmakta
- En çok 15 yaş üstünde artış ve %2.8
- >185 milyon HCV enfekte kişi

Global Distribution and Prevalence of Hepatitis C Virus Genotypes

Messina C et al. Hepatology 2015;61:77-87.

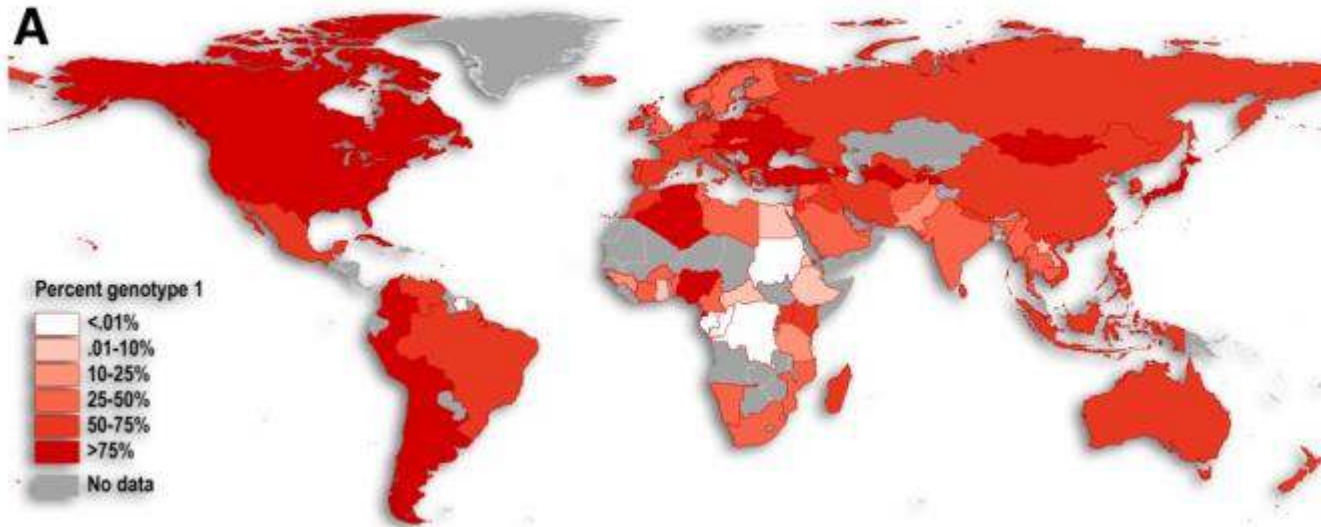
- 1217 alıřmanın derlendiđi metaanalizde
- 117 lkenin sonuları
- %90 dnya nfusunda HCV genotipleri
- %46.2 genotip 1
- %30.1 genotip 3

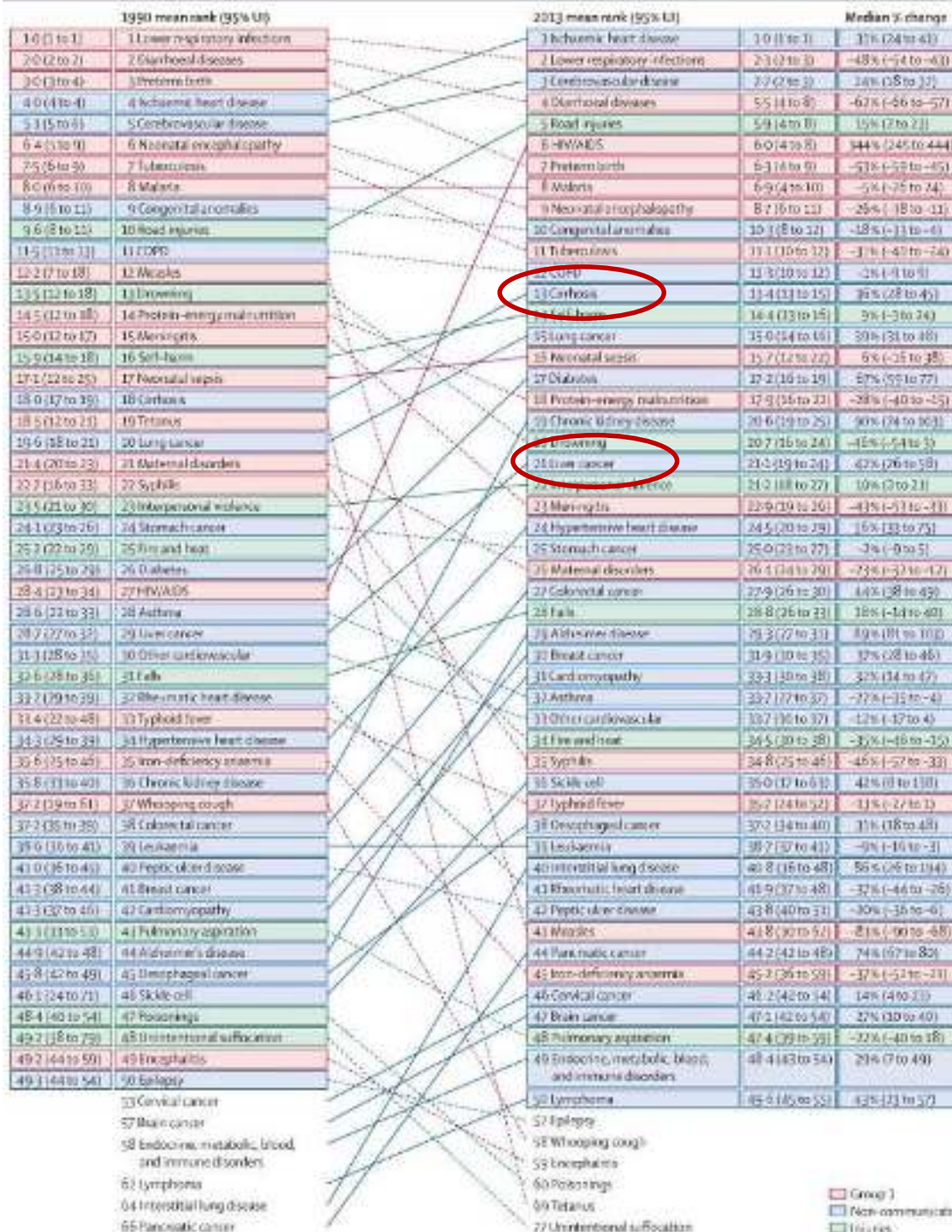
Fig. 1



Relative prevalence of each HCV genotype by GBD region. Size of pie charts is proportional to the number of seroprevalent cases as estimated by Hanafiah et al.²

Genotip 1





Global, regional, and national age-sex specific all-cause and cause-specific mortality for 240 causes of death, 1990–2013: a systematic analysis for the Global Burden of Disease Study 2013

Lancet 2015; 385: 117–71

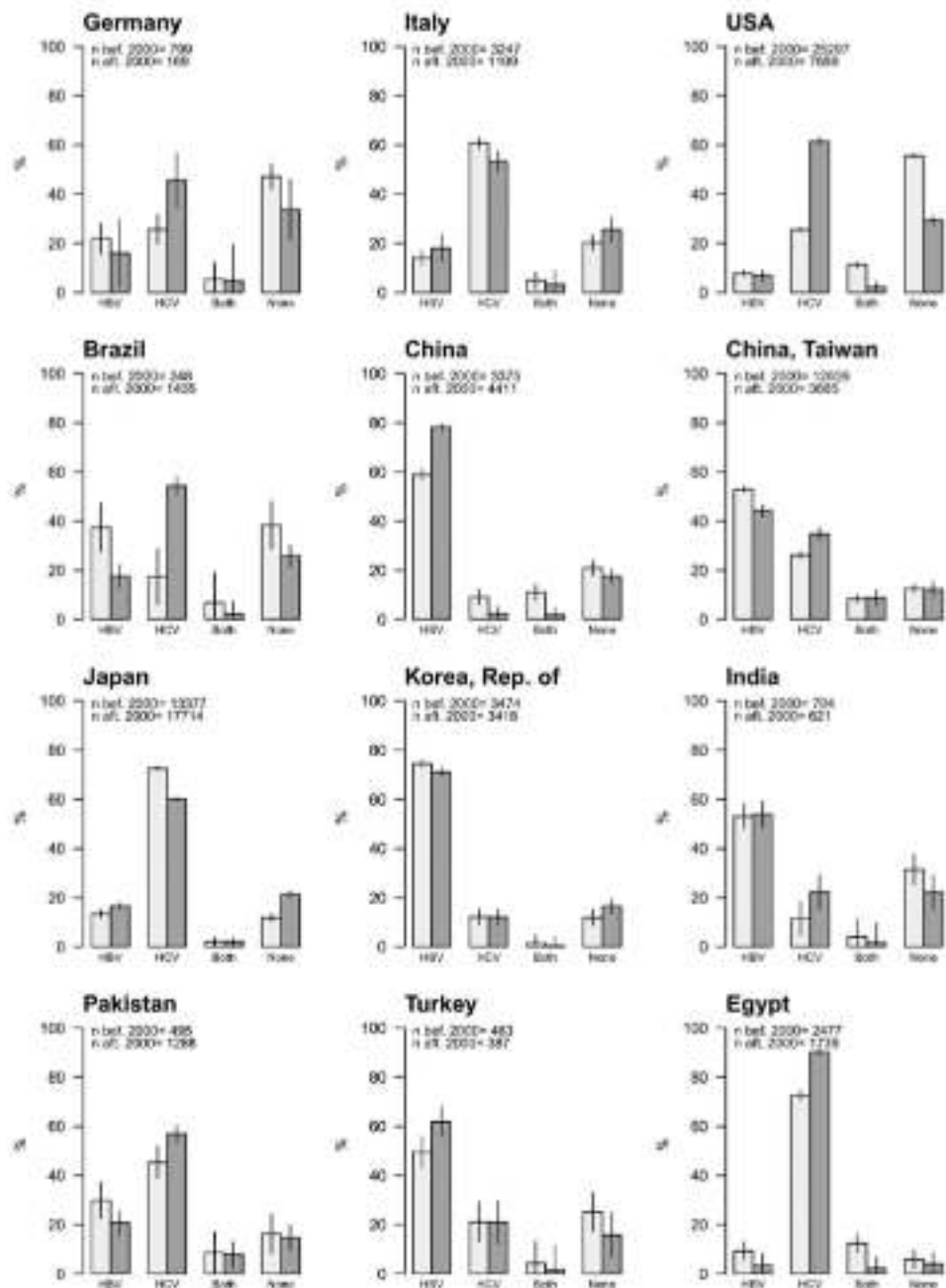
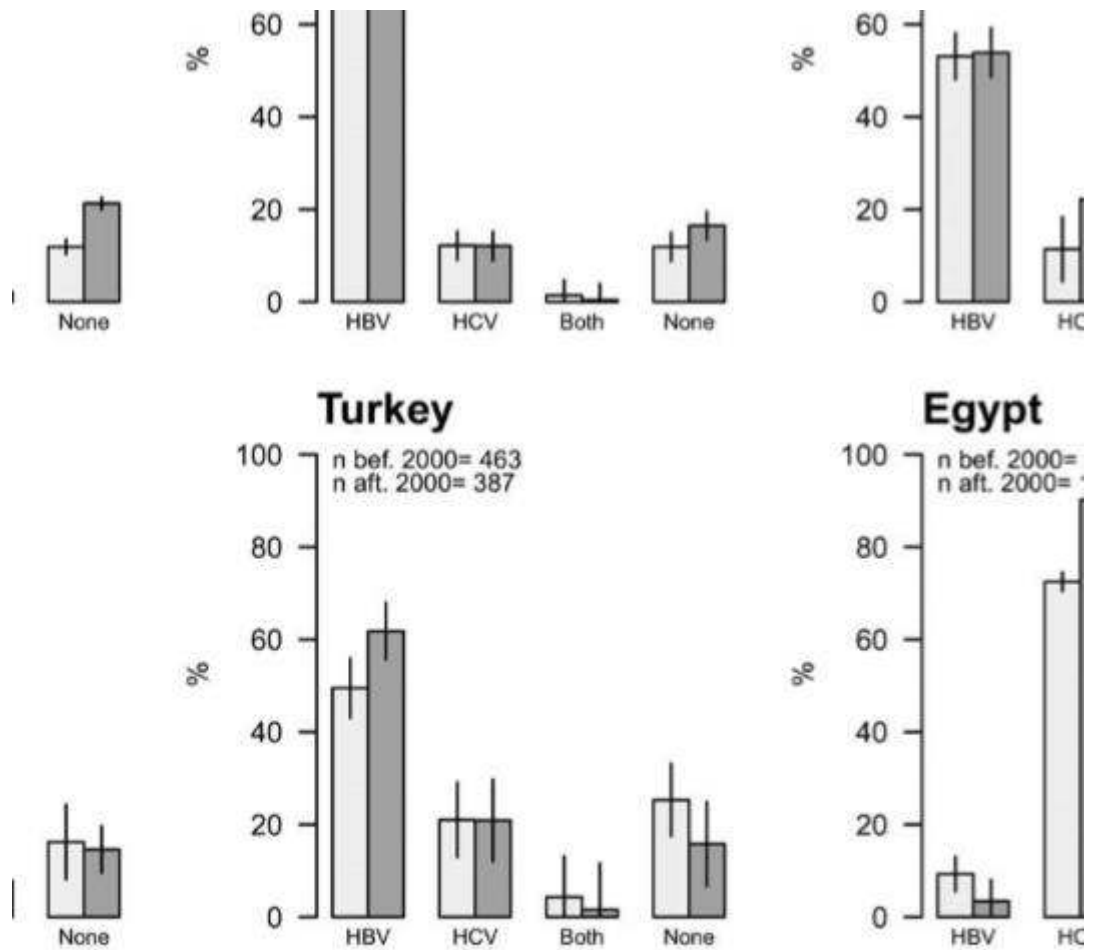


Fig. 5. Seroprevalence of HBsAg, anti-HCV-Ab, both, and neither in patients with HCC in countries for which at least 2 studies, and at least 150 cases, are available in each period before (light gray) and after the year 2000 (dark gray).



tiHCV-Ab, both, and neither in patients with HCC in countries for which at least one study was published before (light gray) and after the year 2000 (dark gray).

EASL Recommendations on Treatment of Hepatitis C 2015

European Association for the Study of the Liver*

] Antiviral treatment in patients with advanced hepatitis C virus cirrhosis with sofosbuvir and either ledipasvir or daclatasvir, with or without ribavirin: observational cohort study

Michelle Cheung, Graham Foster, William Irving, John McLauchlan, Alex Walker, Benjamin Hudson, and others

The Lancet, Vol. 387, S26

Published in issue: February 25, 2016
