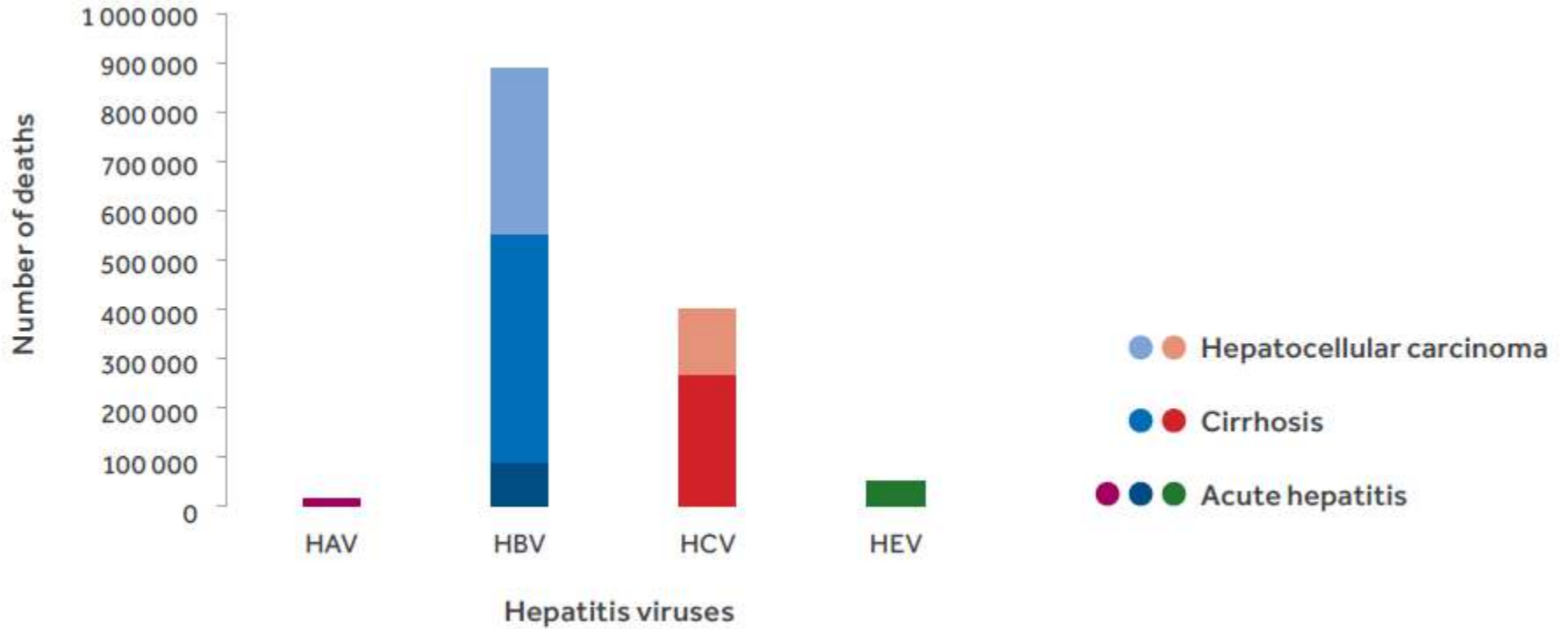


Pandemi Hepatit Eliminasyon Programını Nasıl Etkiledi?

E. Ediz Tütüncü

KLİMİK HEPATİT AKADEMİSİ 2023

7 Ocak 2023, Ankara



➤ 2015

➤ Viral hepatit nedenli 1,34 milyon ölüm

Siroz 720 000

HCC 470 000

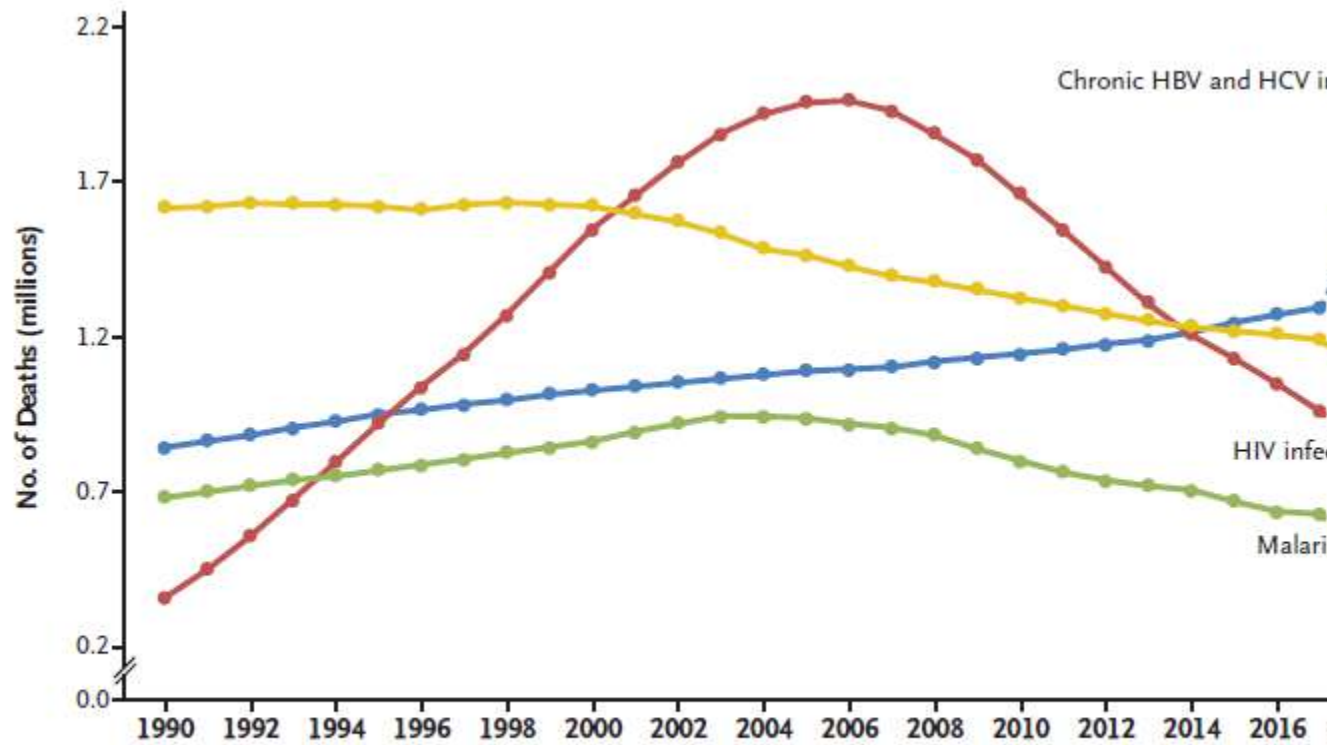


Figure 1. Worldwide Deaths from Chronic Viral Hepatitis as Compared with Deaths from Tuberculosis, Human Immunodeficiency Virus (HIV) Infection, and Malaria.

- HBV ve HCV infeksiyonlarına bağlı ölüm sayısı HIV, tüberküloz ve sıtma nedenli ölüm sayılarının üzerine çıkmıştır.

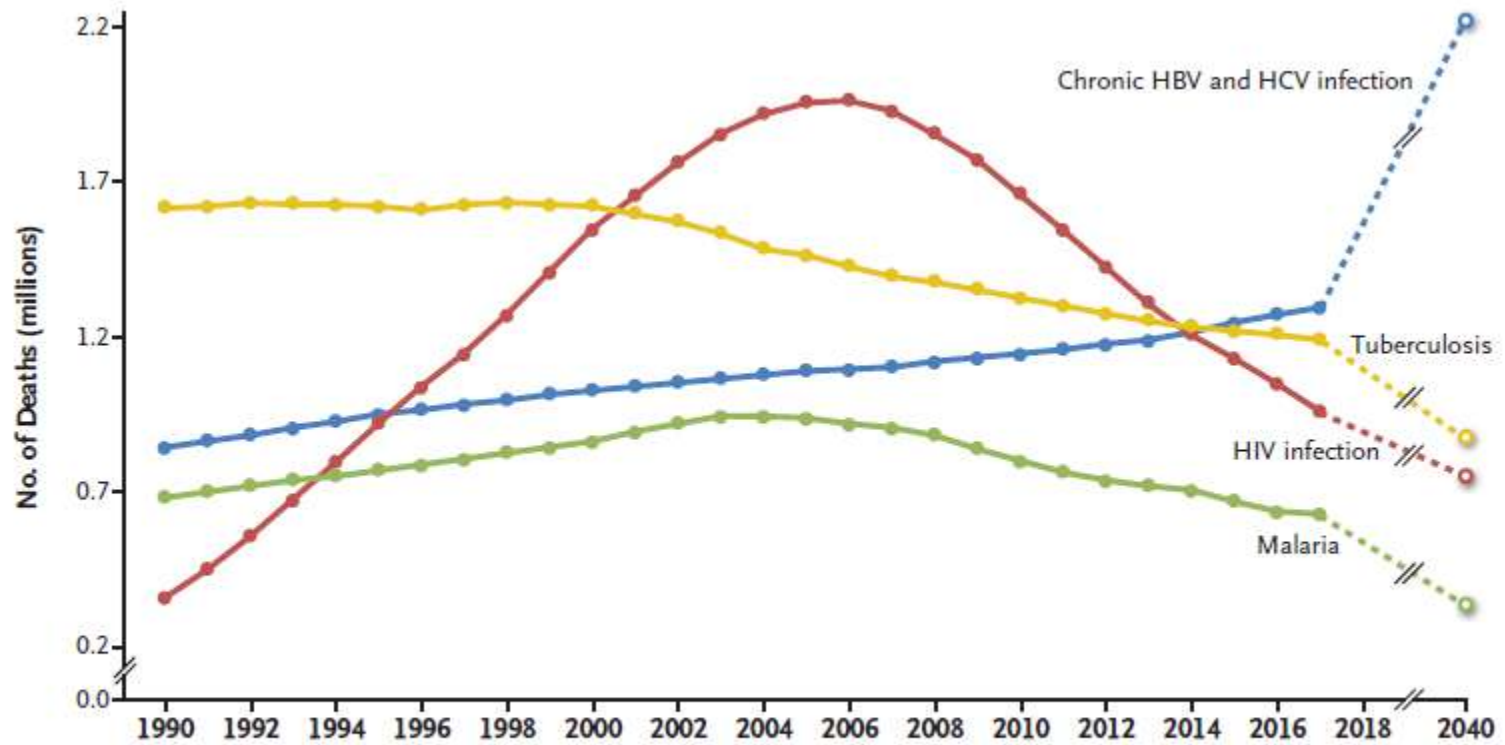


Figure 1. Worldwide Deaths from Chronic Viral Hepatitis as Compared with Deaths from Tuberculosis, Human Immunodeficiency Virus (HIV) Infection, and Malaria.

- 2040
- Kronik hepatit nedenli ölüm sayısı HIV, tüberküloz ve sıtma nedenli ölüm sayılarının toplamını aşacak.

Prevalans

➤ 2015

257 milyon kronik HBV infeksiyonu

71 milyon kronik HCV infeksiyonu

➤ 36,7 milyon HIV olgusu

2,7 milyon kronik HBV

2,3 milyon kronik HCV koinfeksiyonu

GLOBAL HEPATITIS REPORT, 2017



- DSÖ 2017
- Hepatit eliminasyonu ve bu amaca 2030 yılına dek ulaşmak adına stratejiyi tanımlayan rapor

REVIEW ARTICLE

Dan L. Longo, M.D., *Editor*

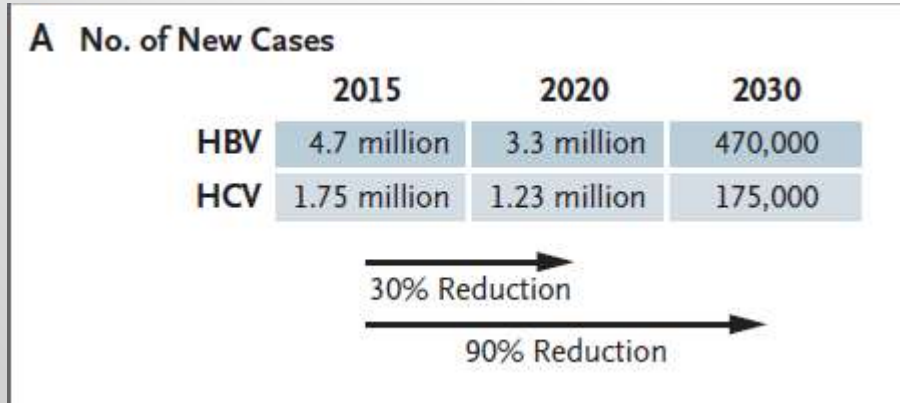
Global Elimination of Chronic Hepatitis

David L. Thomas, M.D., M.P.H.

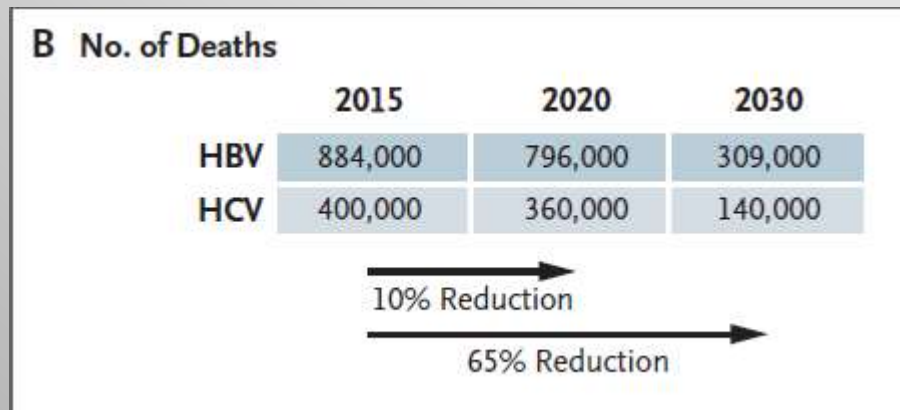
Eliminasyon $\neq$ Eradikasyon

- Global sağlık çerçevesinde,
bir hastalığın halk sağlığı tehdidi olmaktan
eliminasyonu, tam eradikasyon ile bölgesel kontrol
arasında bir hedef olarak tanımlanır.

DSÖ Hepatit Eliminasyon Hedefleri



➤ 2030'a dek,
Yeni olgu sayısında
%90 azalma



Ölüm sayısında %65
azalma

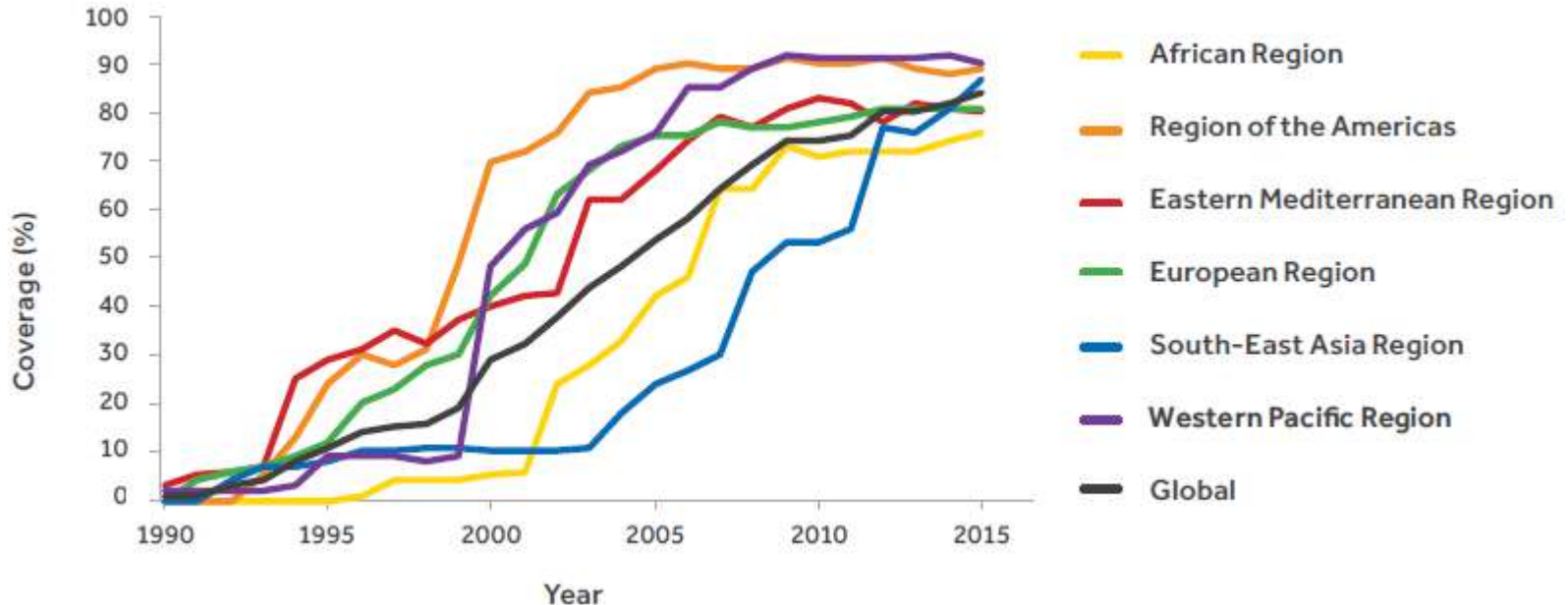
Nasıl?

1- HBV bağışıklaması

➤ 3 doz hepatit B aşısı olan çocukların oranı

2015 %84

2030 hedefi %90



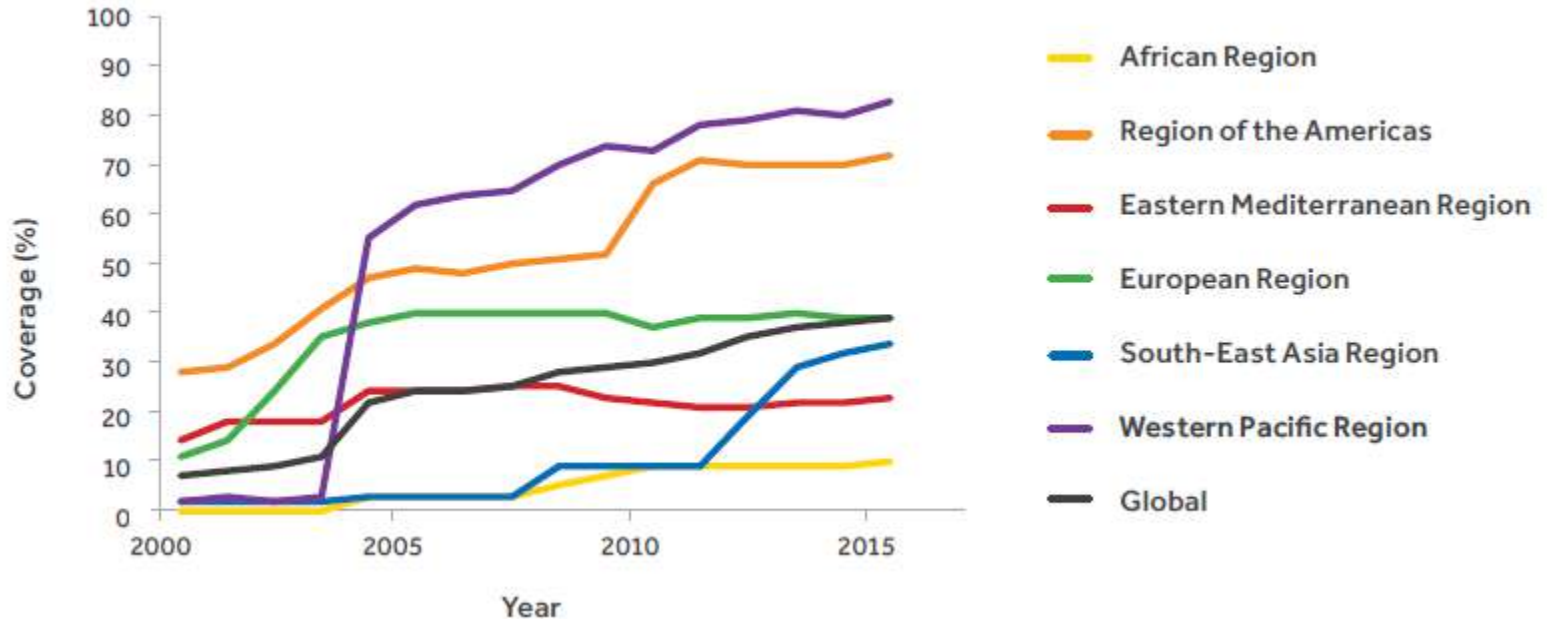
Nasıl?

2- Maternal HBV bulaşının önlenmesi

➤ Doğumda HBV aşılması yapılan yenidoğanların oranı

2015 %39

2030 hedefi %90



Nasıl?

3- Kan ürünleri ve enjeksiyon güvenliği

➤ Kan ürünleri güvenliği

2015 %97

2030 hedefi %100

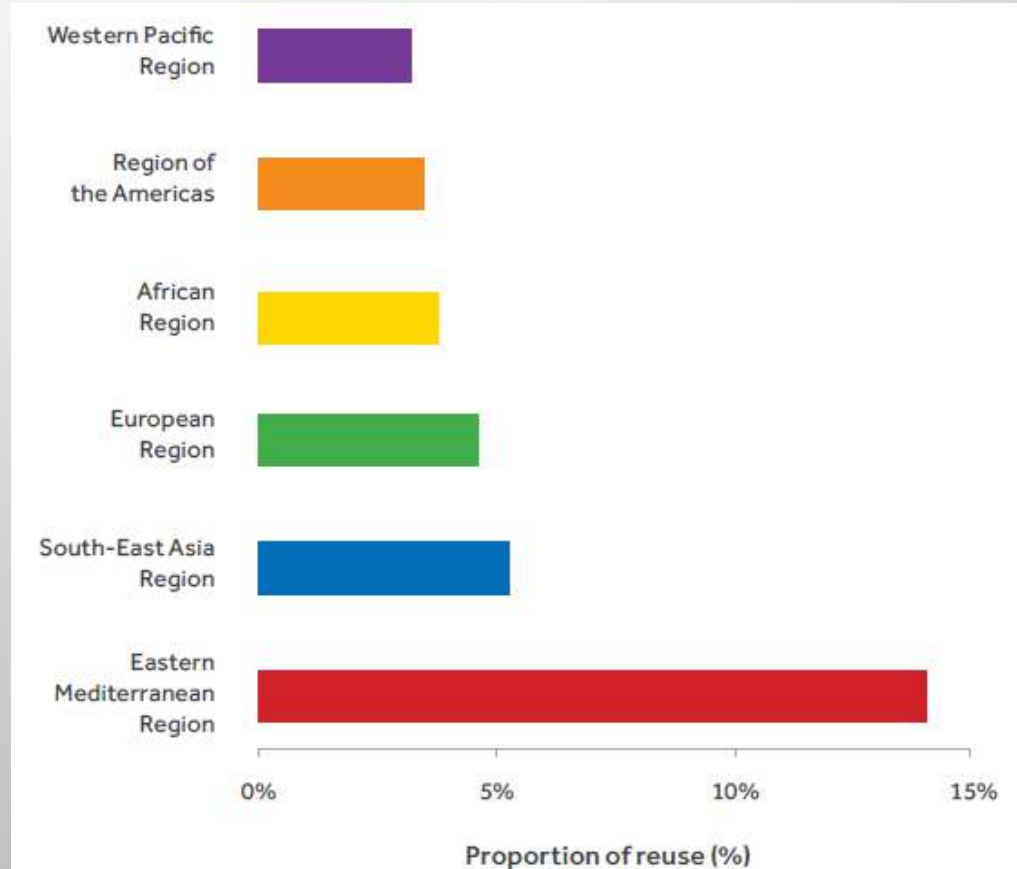
Nasıl?

3- Kan ürünleri ve enjeksiyon güvenliği

➤ Güvenli olmayan enjeksiyonların oranı

2015 %5

2030 hedefi %0



Nasıl?

4- Harm reduction

➤ IVDU verilen enjektör sayısı/yıl

2015 27

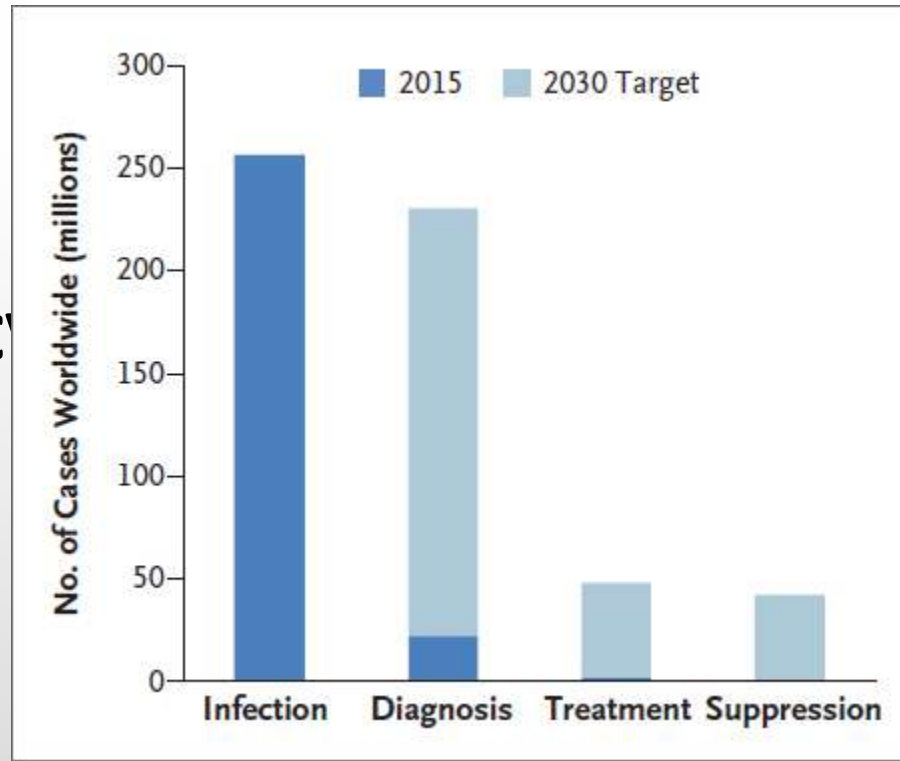
2030 hedefi 300

WHO region	Size of the population injecting drugs			Proportion of countries with needle and syringe programmes (%) ^b	Needle and syringe distribution ^c (93)	
	Number ^a (millions)	Prevalence (%) in the population 15–64 years	Proportion of countries reporting data on PWID (%)		% of countries with data ^d	Median # of syringes/ PWID/ year ^e
African Region	0.52	0.1	30	11	2	6
Region of the Americas	2.75	0.42	34	26	9	22
Eastern Mediterranean Region	0.92	0.23	43	38	14	25
European Region	3.97	0.66	92	91	58	59
South-East Asia Region	0.56	0.04	82	55	55	29
Western Pacific Region	3.03	0.23	33	33	26	57
World	11.75 ^f	0.25	53	36	26	27

Nasıl?

5- HBV HCV tanı ve tedavisi

5- HBV HC

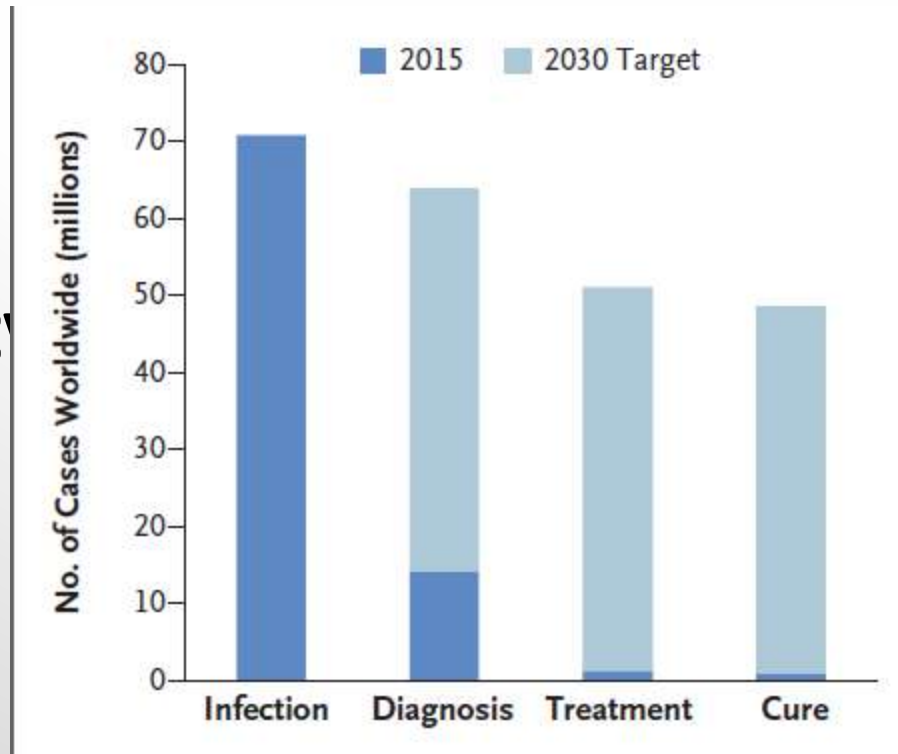


➤ Kronik HBV infeksiyonu 257 milyon

Tanı alanlar 22 milyon (%9)

Tedavi edilenler 1,7 milyon (%8)

5- HBV HCV



- Kronik HCV infeksiyonu 71 milyon
- Tanı alanlar 14 milyon (%20)
- Tedavi edilenler 1 milyon (%7)

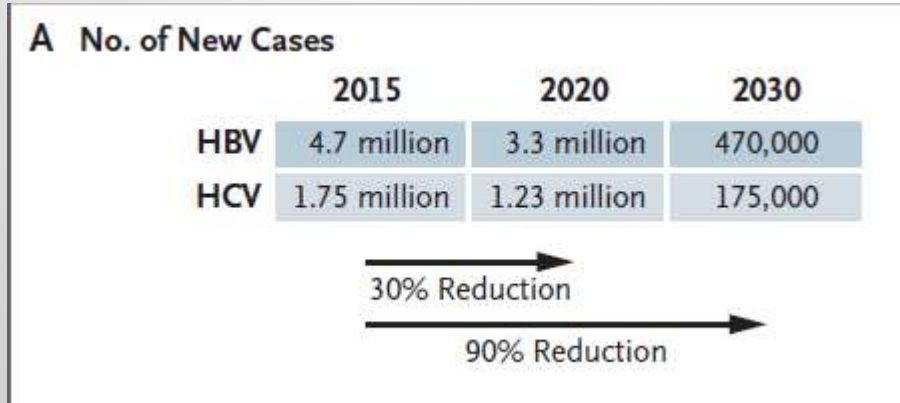
Nasıl?

5- HBV HCV tanı ve tedavisi

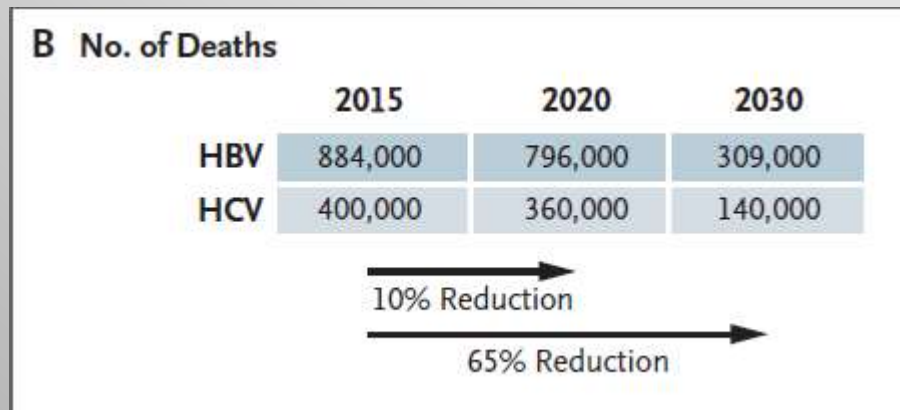
	HBV tanı	HBV tedavi
2015	%9	%8
2030 hedefi	%90	%80

	HCV tanı	HCV tedavi
2015	%20	%7
2030 hedefi	%90	%80

DSÖ Hepatit Eliminasyon Hedefleri



➤ 2030'a dek,
Yeni olgu sayısında
%90 azalma



Ölüm sayısında %65
azalma

- Viral hepatit eliminasyonu geniş bir halk sağlığı yaklaşımı gerektirmektedir,
- En başarılı müdahaleler, var olan halk sağlığı altyapısı çerçevesinde yürütülebilenlerdir.

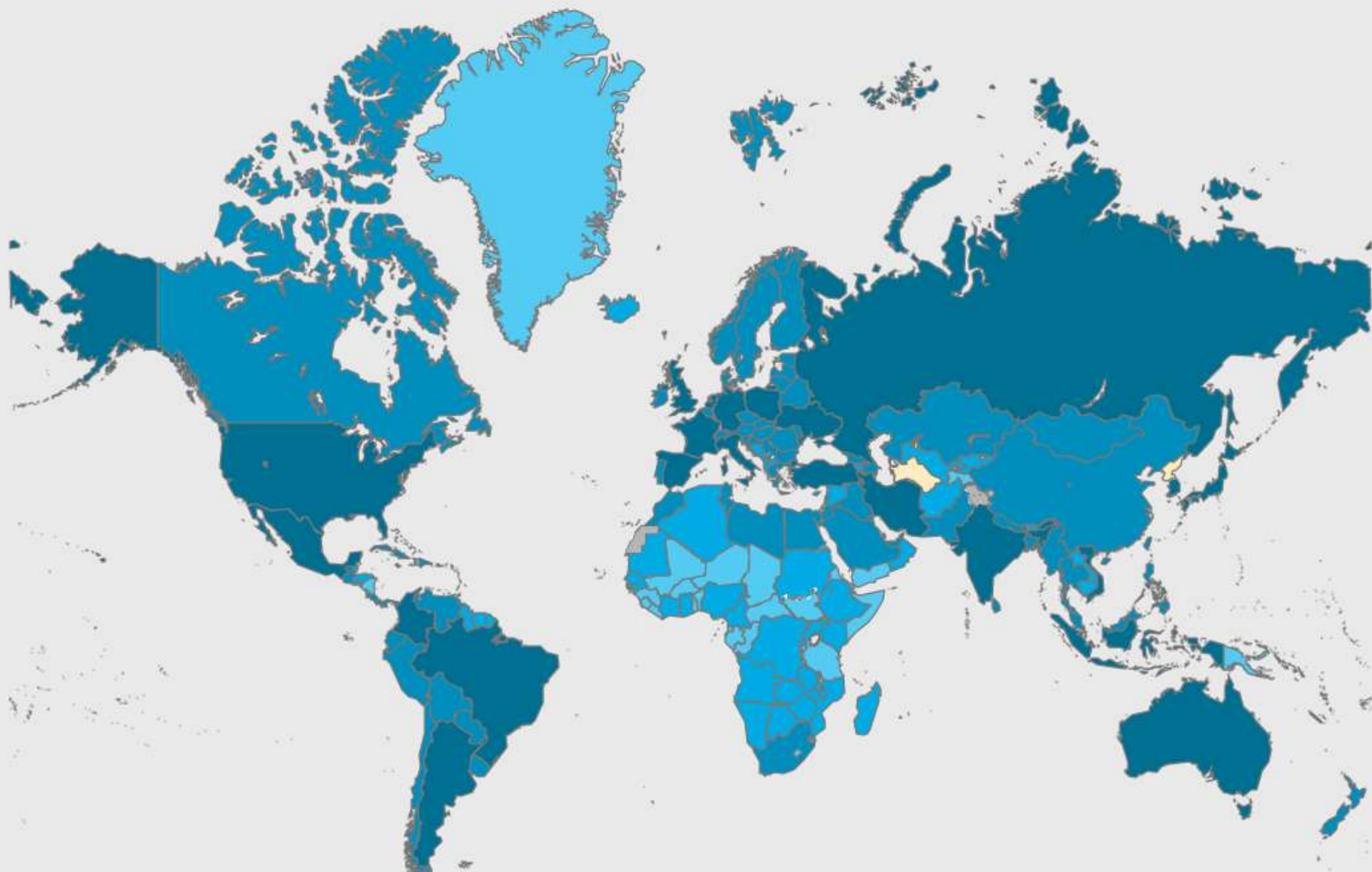
Halk sađlığı yaklaşımı

- İyi bir sađlık bilgi sistemi ihtiyacı,
- Etkin hizmet dağıtım planlaması,
- Uygun biçimde eğitilmiş, uygun sayıda ve dağılımı iyi planlanmış sađlık çalışanları,
- Tıbbi ürün ve teknolojilere kesintisiz erişim,
- Sađlık finansmanının sağlanması,
- Güçlü liderlik ve yönetim

Table 1. Targets for the Primary Interventions Projected by the World Health Organization (WHO) to Eliminate Chronic Hepatitis by 2030.*

Intervention	Indicator	2015 Baseline	2020 Target	
HBV vaccination	% of infants with HEPB3 vaccination	84	90	%85
Prevention of maternal HBV transmission	% of infants with HBV vaccination ≤ 12 hr after birth	39	50	%43
Blood safety	% of donations screened with quality assurance	97	98†	%97
Injection safety‡	% of unsafe injections	5	0	%3,9
Harm reduction§	No. of syringes or needles distributed/injection drug user/yr	27	200	33
HBV diagnosis	% of infected persons who receive a diagnosis	9	30	%12
HCV diagnosis	% of infected persons who receive a diagnosis	20	30	%21
HBV treatment¶	% of persons with diagnosed infection who are treated	8	—	
HCV treatment¶	% of persons with diagnosed infection who are treated	7	—	

WHO Coronavirus (COVID-19) Dashboard



Covid-19 pandemisi

- Sağlık hizmeti sunumunun pandeminin kontrolüne yönelik yeniden şekillenmesi,
 - Karantina uygulamaları,
 - Seyahat kısıtlamaları,
 - Sosyal mesafe kuralları,
 - Tedarik zincirlerindeki aksamalar
- sağlık hizmeti sunumunda aksaklıklara yol açtı.

Pulse survey on continuity of essential health services during the COVID-19 pandemic



Interim report
27 August 2020

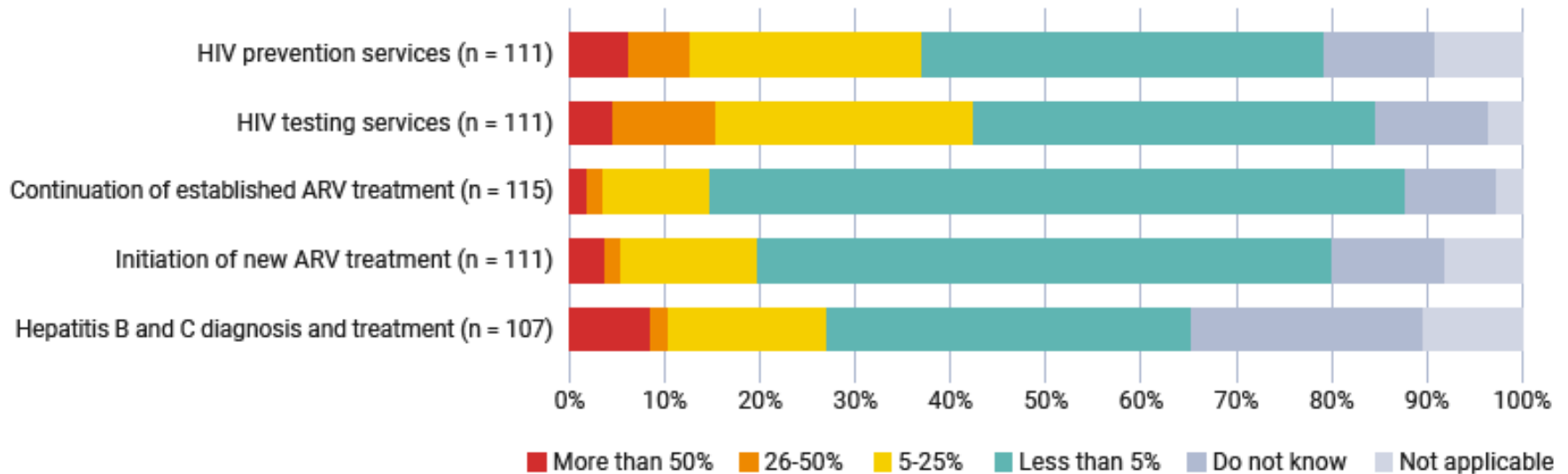
- DSÖ
- Mayıs - Temmuz 2020,
- 105 ülke,
- >%95 sağlık hizmeti sunumunda aksama

Pulse survey on continuity of essential health services during the COVID-19 pandemic



- Rutin bağışıklama hizmetleri %70,
- Bulaşıcı olmayan hastalık tanı ve tedavisi %69,
- Aile planlaması ve kontrasepsiyon %68,
- Antenatal bakım %56,
- Kanseri tanı ve tedavisi %55

Fig. 13. Disruption in other services for HIV and viral hepatitis, March 2021



➤ HBV HCV tanı ve tedavisine yönelik hizmetlerde aksama %65

ABOUT US

We are an international network of organisations working in over 100 countries towards the goal of eliminating hepatitis by 2030.



➤ 99 ülkede >300 üye organizasyonu temsil eden WHA



The impact of COVID-19 on hepatitis elimination

Around the world, the communities most underserved by health systems have been among the hardest hit by the COVID-19 pandemic.¹ Often, these are the same groups that are disproportionately affected by viral hepatitis. With just 10 years to achieve WHO's target,

23 (34%) of 68 respondents outside the USA reported that people on treatment for hepatitis were unable to access their medications at this time. Lack of access to medications was more common in low-income and middle-income countries (LMICs), with 15 (52%)

Lancet Gastroenterol Hepatol
2020

Published Online

July 27, 2020

[https://doi.org/10.1016/S2468-1253\(20\)30238-7](https://doi.org/10.1016/S2468-1253(20)30238-7)

- 30 Mart – 4 Mayıs 2020,
- 32 ülke, 132 üye organizasyon,
sivil toplum örgütleri, hepatit servis
sağlayıcıları
- 13 soruluk anket çalışması



The impact of COVID-19 on hepatitis elimination

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[https://doi.org/10.1016/S2468-1253\(20\)30238-7](https://doi.org/10.1016/S2468-1253(20)30238-7)

- Hizmet sunumunda aksama %94,
- Viral hepatit testlerine erişim %36
 - Test merkezlerinin kapalı olması
- ABD dışındaki katılımcıların %34'ü ilaç erişim sıkıntısı bildirdi
 - ABD için %8



The impact of COVID-19 on hepatitis elimination

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- Seyahat kısıtlamaları,
- Sağlık hizmeti sunumunun kaydırılması,
- Halkın Covid-19 nedeniyle sağlık kuruluşlarından uzak durması



The impact of COVID-19 on hepatitis elimination

Around the world, the communities most underserved by health systems have been among the hardest hit by the COVID-19 pandemic.¹ Often, these are the same groups that are disproportionately affected by viral hepatitis. With just 10 years to achieve WHO's target,

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- Viral hepatit hastalarına Covid-19 ile ilgili uygun bilgilendirme yapılması %30



COALITION
FOR GLOBAL
HEPATITIS
ELIMINATION

A program of:
**THE TASK
FORCE**
FOR
GLOBAL HEALTH

About

Programs

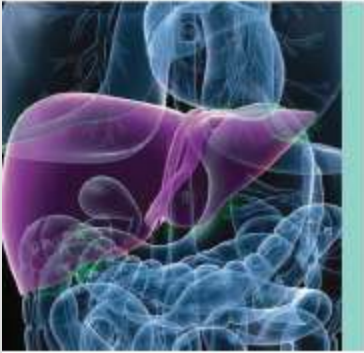
Data dashboards

Evidence base

Resources

Webinars

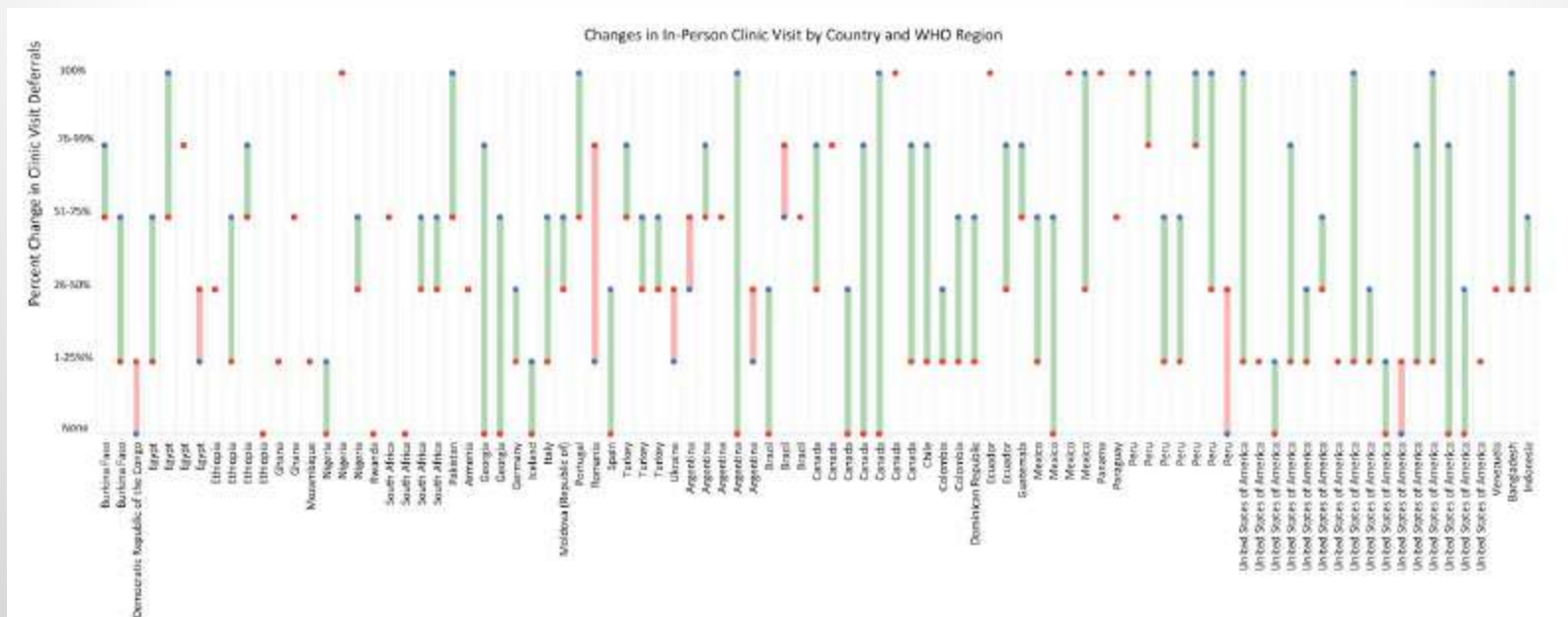
➤ Coalition for Global Hepatitis Elimination (CHGE)



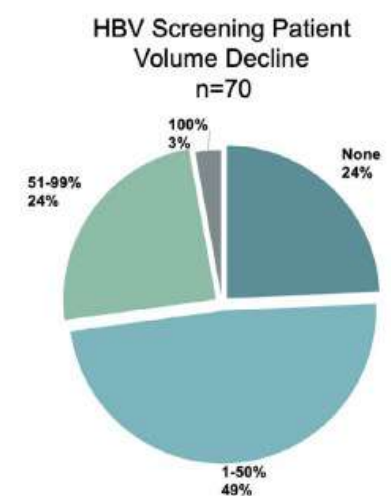
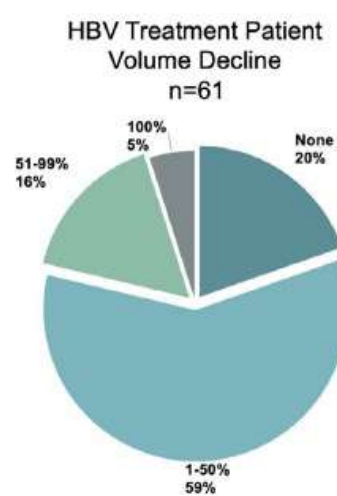
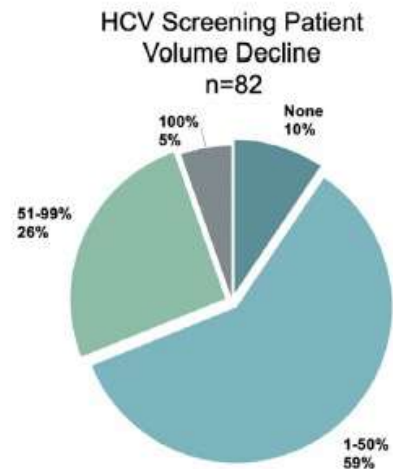
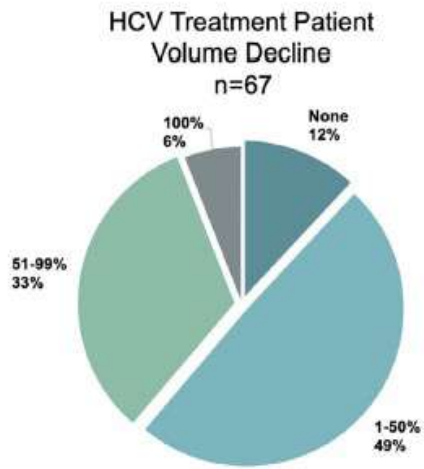
Impact of COVID-19 Response on Hepatitis Prevention Care and Treatment: Results From Global Survey of Providers and Program Managers

*Jessica Laury, M.P.H.(c), * Lindsey Hiebert, M.P.H.,[†] and John W. Ward, M.D.[†]*

- 12 Ağustos – 16 Aralık 2020,
- 44 ülke, 103 klinisyen ve program yöneticisi,
- 53 soruluk anket çalışması



- Covid-19 yoğunluğunun en fazla olduğu aylarda klinikte kabul edilen hasta sayısında >%50 azalma %65,
- Covid-19 öncesi döneme göre hasta sayısında azalma %80



➤ Taranan hasta sayısında >%50 azalma

HCV %28

HBV %27

➤ Tedavi edilen hasta sayısında >%50 azalma

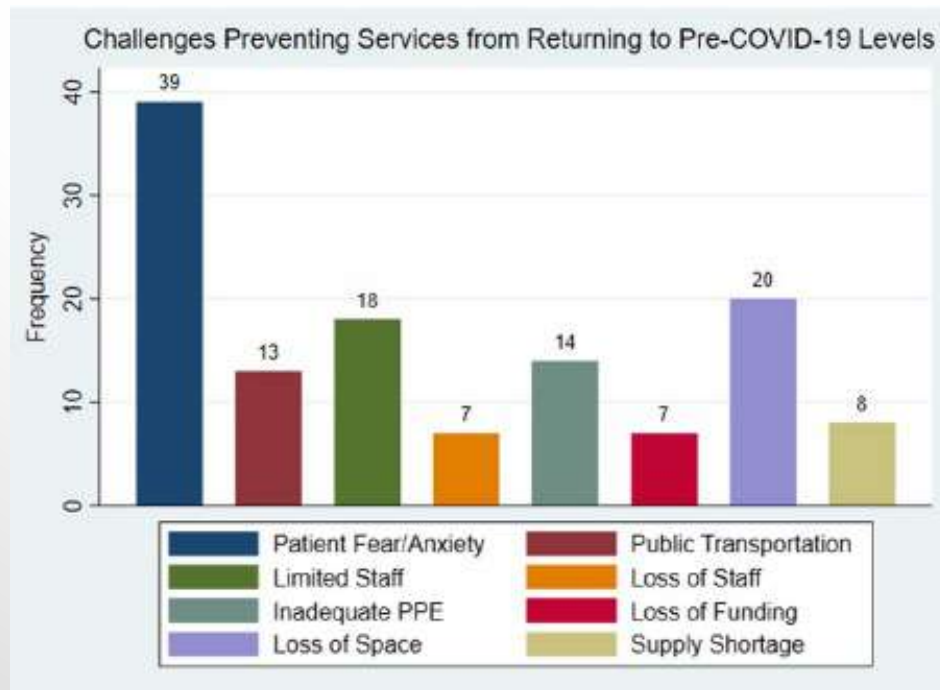
HCV %39

HBV %21

TABLE 2. SUPPLY CHAIN DISRUPTIONS REPORTED BY PROGRAM MANAGERS (N = 33)

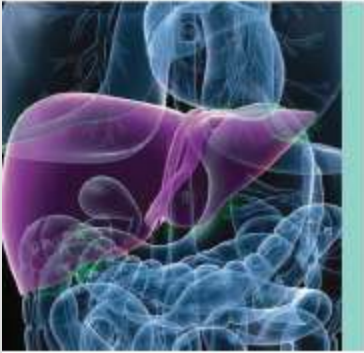
Supply Product	% (n)
HCV diagnostics	27% (9)
HCV treatment	27% (9)
HBV diagnostics	21% (7)
HBV treatment	15% (5)

➤ HBV HCV tanı ve tedavisinde tedarik aksaklıkları



- Hasta endişesi,
- Personel eksikliği,
- KKE eksikliği,
- Mekan kaybı

- Toplu taşıma sorunları,
- Personel kaybı,
- Finansal destek kaybı,
- Malzeme eksiklikleri



Impact of COVID-19 Response on Hepatitis Prevention Care and Treatment: Results From Global Survey of Providers and Program Managers

*Jessica Laury, M.P.H.(c), * Lindsey Hiebert, M.P.H.,[†] and John W. Ward, M.D.[†]*

- Sonuç olarak, Covid-19 pandemisi hepatit önleme, test, tedavi kapasitesinde azalmaya ve hepatit eliminasyonu hedefinde yavaşlamaya neden olmuştur.



Impact of COVID-19 on global HCV elimination efforts

Sarah Blach^{1,*}, Loreta A. Kondili², Alessio Aghemo^{3,4}, Zongzhen Cai¹, Ellen Dugan¹,
Chris Estes¹, Ivane Gamkrelidze¹, Siya Ma¹, Jean-Michel Pawlotsky^{5,6}, Devin Razavi-Shearer¹,
Homie Razavi¹, Imam Waked⁷, Stefan Zeuzem⁸, Antonio Craxi⁹

¹Center for Disease Analysis Foundation, Lafayette, CO, USA; ²National Center for Global Health-Istituto Superiore di Sanità, Rome, Italy; ³Internal Medicine and Hepatology Division, Humanitas Clinical and Research Center – IRCCS, Rozzano, Milan, Italy; ⁴Humanitas University, Department of Biomedical Sciences, Milan, Italy; ⁵National Reference Center for Viral Hepatitis B, C and D, Department of Virology, Hôpital Henri Mondor, Créteil, France; ⁶INSERM U955, Créteil, France; ⁷National Liver Institute, Menoufia University, Al Minufya, Egypt; ⁸Internal Medicine Department, Goethe University Hospital, Frankfurt, Germany; ⁹Gastroenterology and Hepatology Unit, Department of Internal Medicine and Medical Specialties, University of Palermo, Palermo, Italy

➤ Mısır, Mart 2020

Çocuklar, gebeler, ülkede yaşayan yabancılar, mahkum popülasyonlarında yürütülen tarama çalışmalarının tamamı durduruldu,

Mısır sağlık bakanlığına bağlı rutin hizmet veren HCV tedavi ve siroz takip ünitelerinin >%75 kapatıldı.

Dr. Gülşen İSKENDER
Abdurrahman Yurtaslan Ankara Onkoloji Eğitim ve Araştırma Hastanesi
Türkiye

golshan1669@hotmail.com

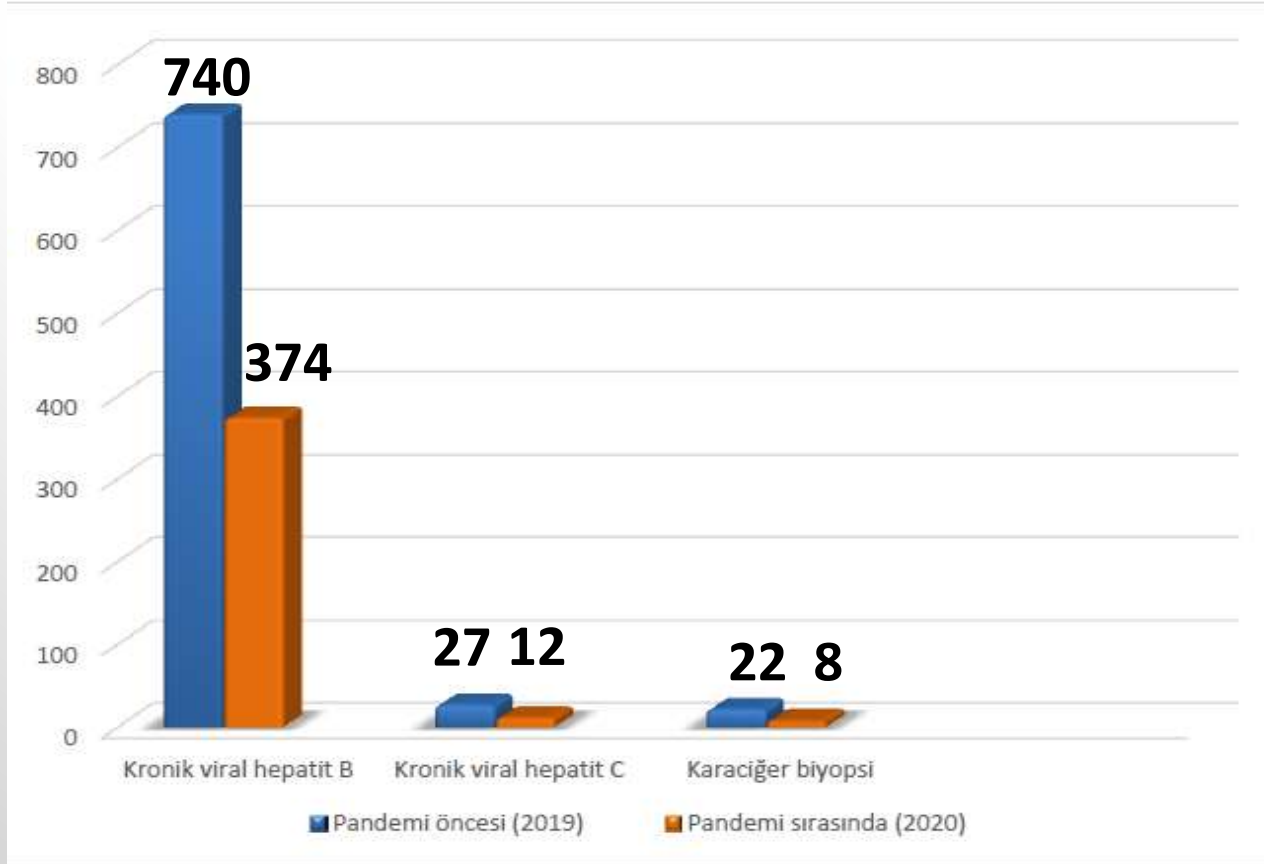
 ORCID 0000-0003-0601-1424



COVID-19 PANDEMİSİNİN KRONİK VİRAL HEPATİT HİZMETLERİ
ÜZERİNDEKİ ETKİSİ

EFFECT OF THE COVID-19 PANDEMIC ON CHRONIC VIRAL HEPATITIS SERVICES

- 1 Nisan – 15 Ağustos 2020 ile 2019 aynı dönemde hepatit polikliniğine başvuran hastalar retrospektif olarak karşılaştırılmış.



- Pandemi döneminde,
Kronik hepatit B başvurularında %49,4
Kronik hepatit C başvurularında %55,5
Karaciğer biyopsilerinde %63,6 düşüş

Decreases in Hepatitis C Testing and Treatment During the COVID-19 Pandemic



Harvey W. Kaufman, MD,¹ Lara Bull-Otterson, PhD,² William A. Meyer III, PhD,¹
Xiaohua Huang, MS,¹ Mona Doshani, MD,³ William W. Thompson, PhD,³ Ademola Osinubi, MS,³
Mohammed A. Khan, PhD,³ Aaron M. Harris, MD,³ Neil Gupta, MD, MPH,³
Michelle Van Handel, MPH,³ Carolyn Wester, MD, MPH,³ Jonathan Mermin, MD, MPH,³
Noele P. Nelson, MD, PhD, MPH³

- Ocak – Temmuz 2018, 2019, 2020 dönemleri
- Ulusal referans laboratuvarı verilerinden
anti-HCV test sayısı,
pozitif anti-HCV test sayısı ve
pozitif HCV-RNA test sayıları
- HCV DAA reçete sayıları

Decreases in Hepatitis C Testing and Treatment During the COVID-19 Pandemic



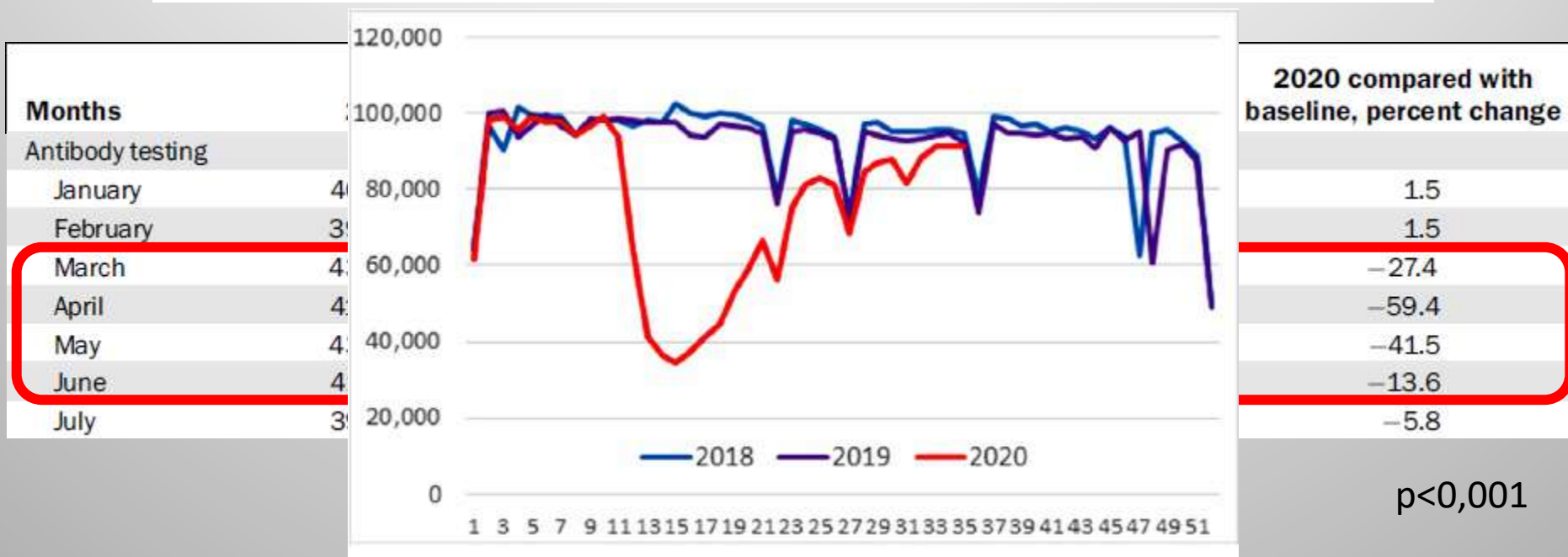
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Michelle Van Handel, MPH,³ Carolyn Wester, MD, MPH,³ Jonathan Mermin, MD, MPH,³
Noele P. Nelson, MD, PhD, MPH³

- Toplam 12 309 475 anti-HCV test sonucu,
- 326 603 HCV RNA test sonucu
- Mart – Temmuz 2018, 2019, 2020 dönemleri
- Toplam 5 587 943 anti-HCV test sonucu,

Decreases in Hepatitis C Testing and Treatment During the COVID-19 Pandemic



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Noele P. Nelson, MD, PhD, MPH³

HCV antibody testing by year, age, sex

Variables	2018 (March–July), n (%)	2019 (March–July), n (%)	2020 (March–July), n (%)
Age, years			
Unknown	1,493 (0.1)	1,253 (0.1)	737 (0.1)
0–19	78,639 (3.8)	82,813 (4.0)	56,797 (3.9)
20–39	789,686 (37.8)	831,065 (40.6)	625,175 (43.1)
40–59	693,239 (33.2)	659,700 (32.2)	452,357 (31.2)
60–84	514,717 (24.6)	463,625 (22.6)	308,215 (21.2)
≥85	10,742 (0.5)	10,096 (0.5)	7,594 (0.5)
Sex			
Female	1,180,244 (56.5)	1,156,144 (56.4)	847,386 (58.4)
Male	902,867 (43.2)	886,914 (43.3)	599,938 (41.4)
Unknown	5,405 (0.3)	5,494 (0.3)	3,551 (0.2)
Total	2,088,516 (100.0)	2,048,552 (100.0)	1,450,875 (100.0)

-%30

Decreases in Hepatitis C Testing and Treatment During the COVID-19 Pandemic



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Noele P. Nelson, MD, PhD, MPH³

Months	2018	2019	2020	Baseline average (2018 and 2019)	2020 compared with baseline, percent change
Antibody positives					
January	22,910	23,451	22,263	23,181	-4.0
February	21,470	21,760	21,464	21,615	-0.7
March	24,805	23,622	17,744	24,214	-26.7
April	23,831	23,106	10,186	23,469	-56.6
May	24,466	23,493	13,137	23,980	-45.2
June	22,714	21,471	15,907	22,093	-28.0
July	21,782	22,273	16,330	22,028	-25.9

p<0,001

Decreases in Hepatitis C Testing and Treatment During the COVID-19 Pandemic



Harvey W. Kaufman, MD,¹ Lara Bull-Otterson, PhD,² William A. Meyer III, PhD,¹
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Noele P. Nelson, MD, PhD, MPH³

Months	2018	2019	2020	Baseline average (2018 and 2019)	2020 compared with baseline, percent change
RNA positives					
January	13,272	13,126	11,164	13,199	-15.4
February	12,343	12,147	10,628	12,245	-13.2
March	14,261	13,175	8,637	13,718	-37.0
April	13,674	12,720	4,980	13,197	-62.3
May	13,928	12,895	6,152	13,412	-54.1
June	12,872	11,654	7,215	12,263	-41.2
July	12,336	11,918	7,345	12,127	-39.4

p<0,001

Decreases in Hepatitis C Testing and Treatment During the COVID-19 Pandemic



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Noele P. Nelson, MD, PhD, MPH³

Months	2018	2019	2020	Baseline average (2018 and 2019)	2020 compared with baseline, percent change
Prescriptions					
January	26,755	22,533	21,032	24,644	-14.7
February	25,138	22,266	20,894	23,702	-11.8
March	28,196	24,148	24,389	26,172	-6.8
April	27,314	25,887	20,568	26,601	-22.7
May	28,366	26,008	15,455	27,187	-43.2
June	24,955	22,870	15,081	23,913	-36.9
July	25,046	24,858	15,399	24,952	-38.3

Decreases in Hepatitis C Testing and Treatment During the COVID-19 Pandemic



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HCV treatment prescriptions by year, age, sex

2018 (January–July), n (%)	2019 (January–July), n (%)	2020 (January–July), n (%)
—	—	—
470 (0.3)	482 (0.3)	605 (0.5)
26,240 (14.1)	31,963 (19.0)	31,968 (24.1)
75,091 (40.4)	65,798 (39.0)	50,729 (38.2)
83,392 (44.9)	69,730 (41.4)	49,126 (37.0)
518 (0.3)	542 (0.3)	292 (0.2)
70,828 (38.2)	64,836 (38.5)	51,200 (38.6)
114,467 (61.8)	103,390 (61.5)	81,460 (61.4)
—	—	—
185,295 (100.0)	168,226 (100.0)	132,660 (100.0)

-%25

Impact of the 2020 COVID-19 Pandemic on Ambulatory Hepatitis C Testing

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Volume 11: 1–4

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Heather Sperring¹ , Glorimar Ruiz-Mercado¹,
and Elissa M. Schechter-Perkins^{1,2}

- Tek merkez, BMC
- 16 Mart 2020'den önceki ve sonraki 3,5 aylık dönemde anti-HCV test sayıları

Impact of the 2020 COVID-19 Pandemic on Ambulatory Hepatitis C Testing

Heather Sperring¹ , Glorimar Ruiz-Mercado¹,
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Table 1. HCV Testing Numbers Before versus After March 16, 2020.

	Before	After	% Difference
Hospital-wide			
Mean daily HCV Ab tests (SD)	45.7 (24.7)	22.8 (8.9)	−50.1
Mean daily new HCV+ identified (SD)	1.9 (1.3)	1.5 (1.5)	−21.1
Total HCV Ab tests	4847	2442	−49.6
New HCV+ identified	159	92	−42.1
Ambulatory only			
Mean daily HCV Ab tests (SD)	30.7 (22.7)	8.5 (7.6)	−72.3
Mean daily new HCV+ identified (SD)	1.9 (1.8)	0.5 (0.7)	−73.7
Total HCV Ab tests	3249	912	−71.9
New HCV+ identified	60	22	−63.3

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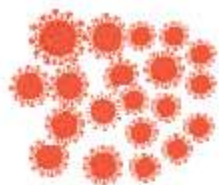
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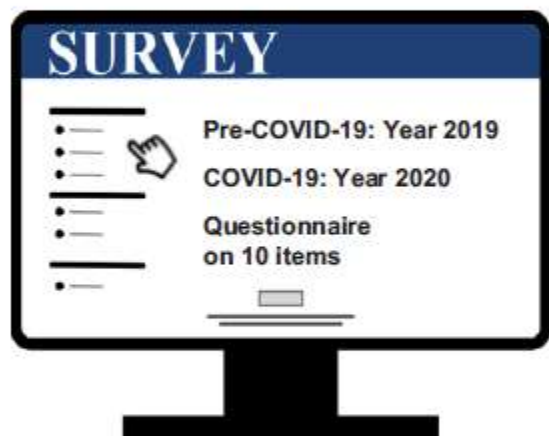
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- Covid-19, HCV test ve tanı kapasitesinde belirgin gerilemeye yol açmıştır.



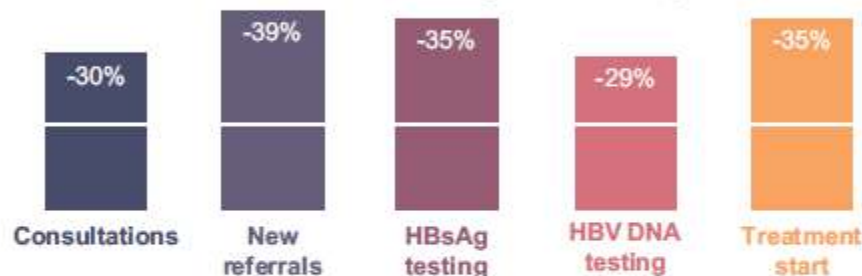
Impact of the COVID-19 pandemic on Hepatitis B and C elimination: A survey of the European Association for the Study of the Liver



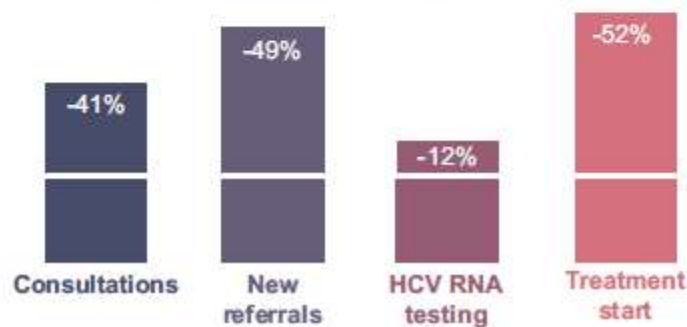
Survey on Hepatitis B and C services performed
between May and July 2021

Data from 32 European and 12 non-European
centers were collected

HBV overall services' reduction during the COVID-19 pandemic



HCV overall services' reduction during the COVID-19 pandemic

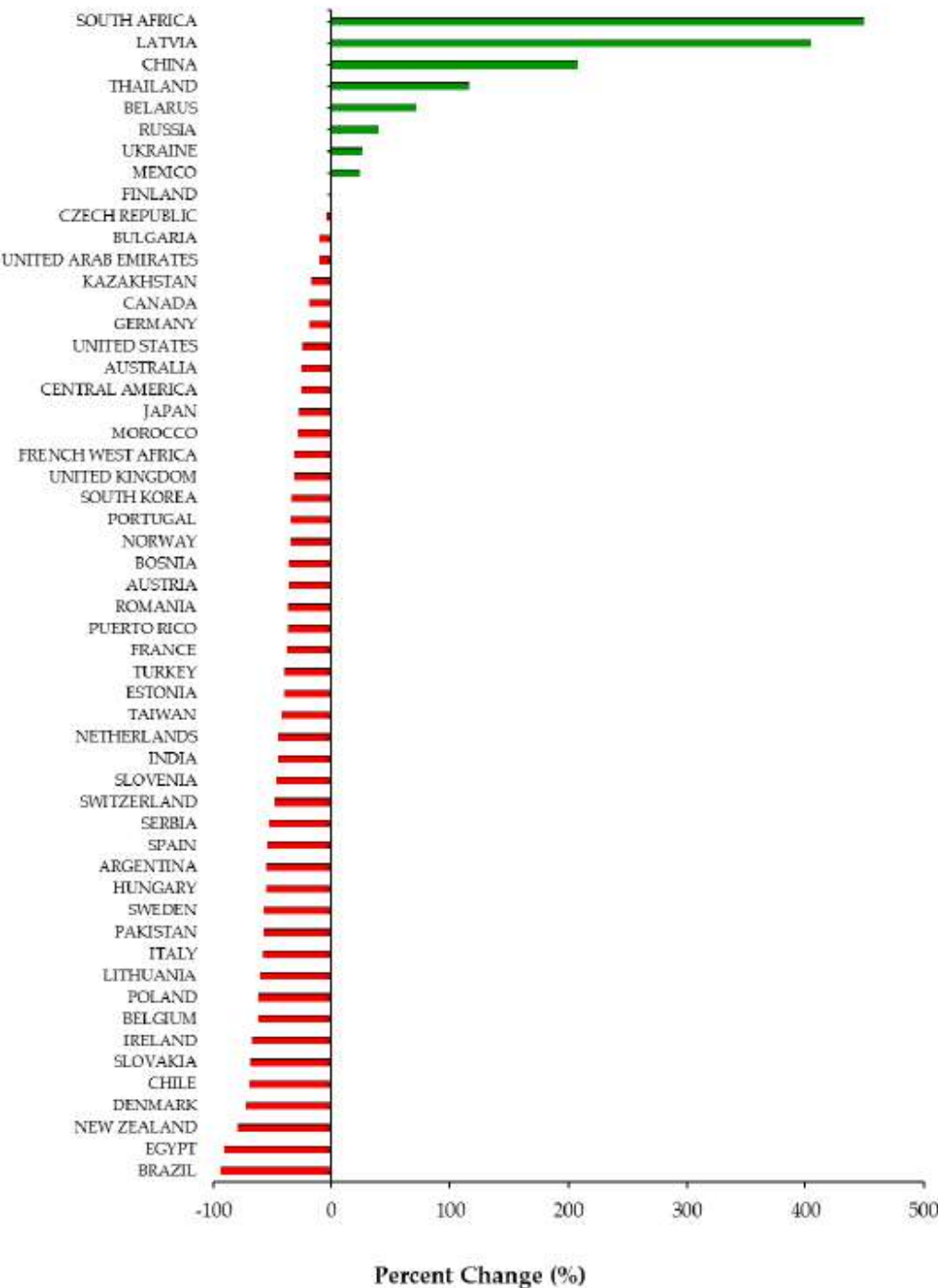


Article

Global Utilization Trends of Direct Acting Antivirals (DAAs) during the COVID-19 Pandemic: A Time Series Analysis

Ahmad Shakeri ¹, Natalia Konstantelos ^{1,2}, Cherry Chu ¹ , Tony Antoniou ^{3,4}, Jordan Feld ⁵, Katie J. Suda ^{6,7} and Mina Tadrus ^{1,2,*} 

- Farklı ülkelerde pandemi döneminde DAA kullanımındaki değişiklikler
- 1 Eylül 2018 – 31 Ağustos 2020 arasında kesitsel zaman aralığı analizi
- 54 ülkede DAA satış verileri



➤ Mart Ağustos 2019 ile Mart Ağustos 2020 arasında,

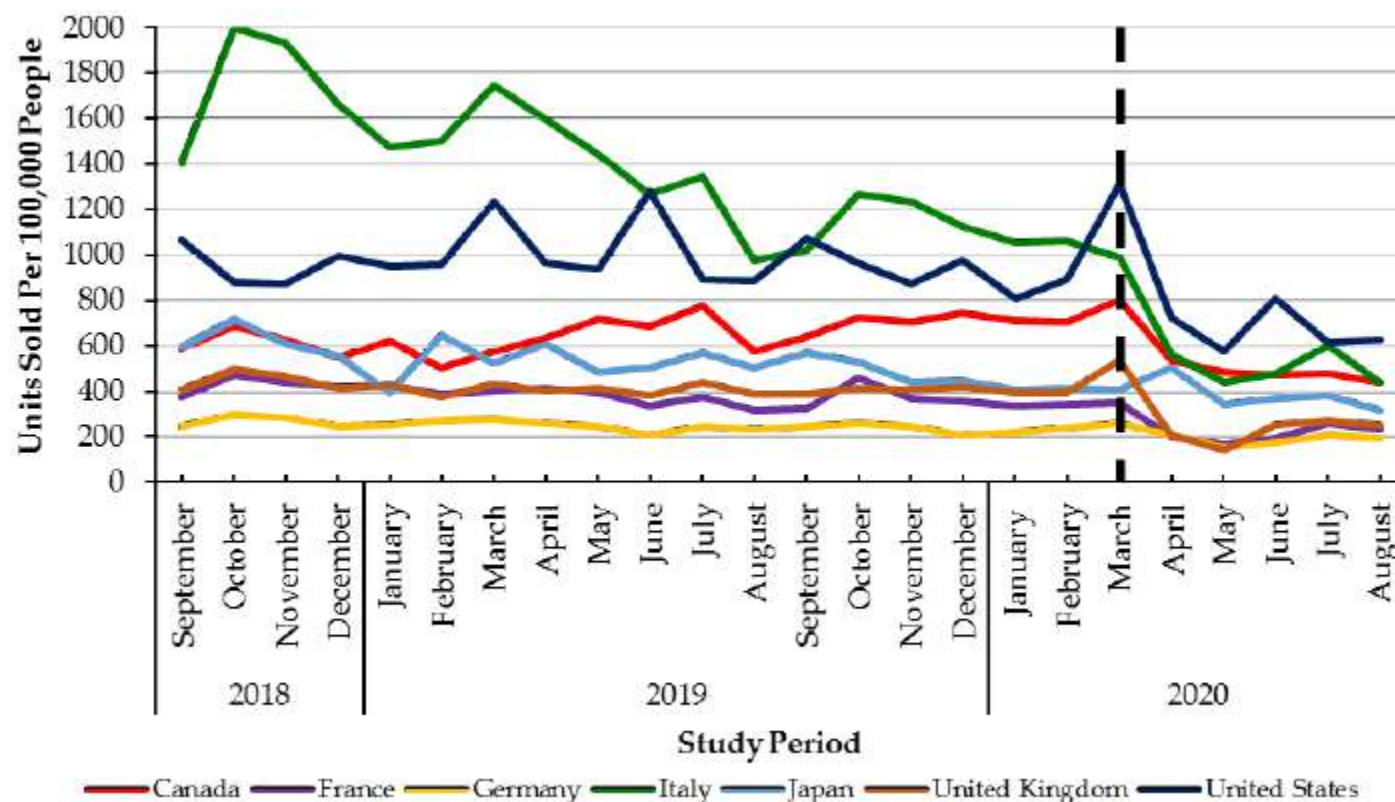
➤ 46/54 ülke (%85) DAA kullanımında azalma, ortalama düşüş %43

➤ HCV prevalansı yüksek ülkelerde ortalama düşüş %49

Article

Global Utilization Trends of Direct Acting Antivirals (DAAs) during the COVID-19 Pandemic: A Time Series Analysis

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- Covid-19 pandemisi DAA kullanımında belirgin gerilemeye yol açmıştır.

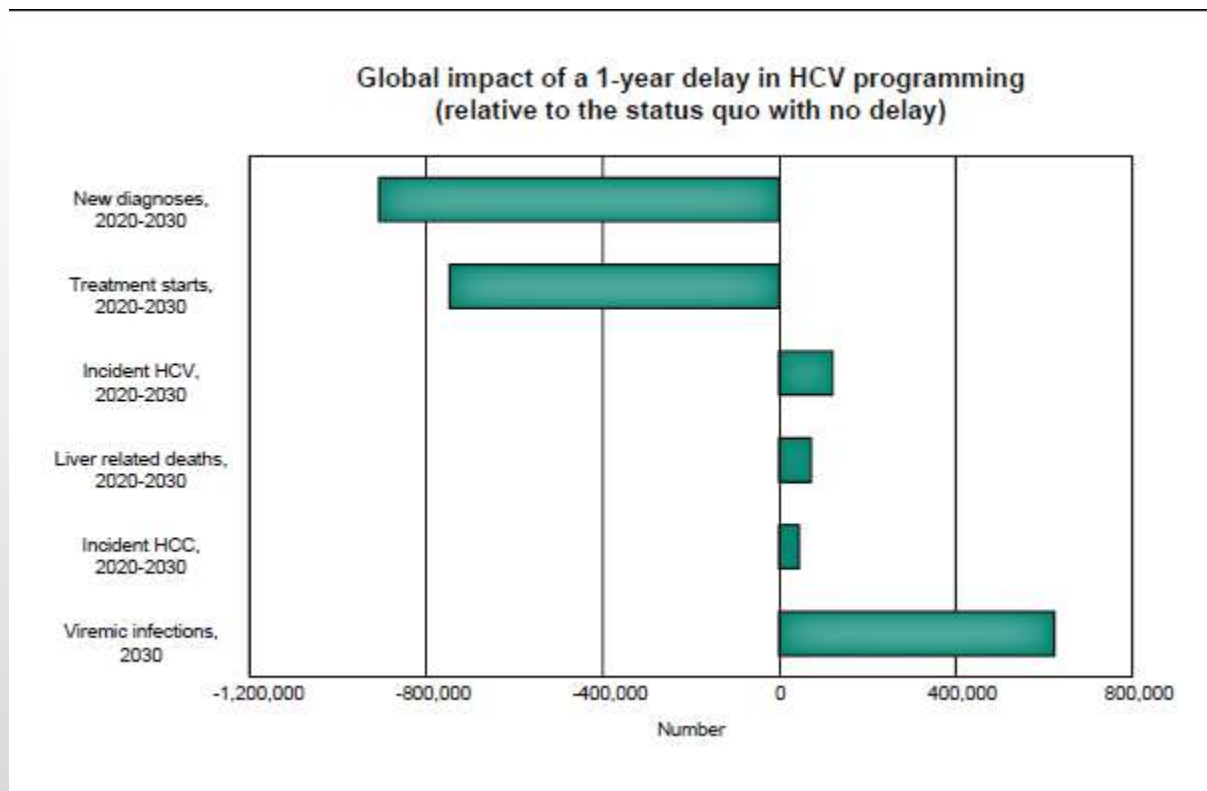


Impact of COVID-19 on global HCV elimination efforts

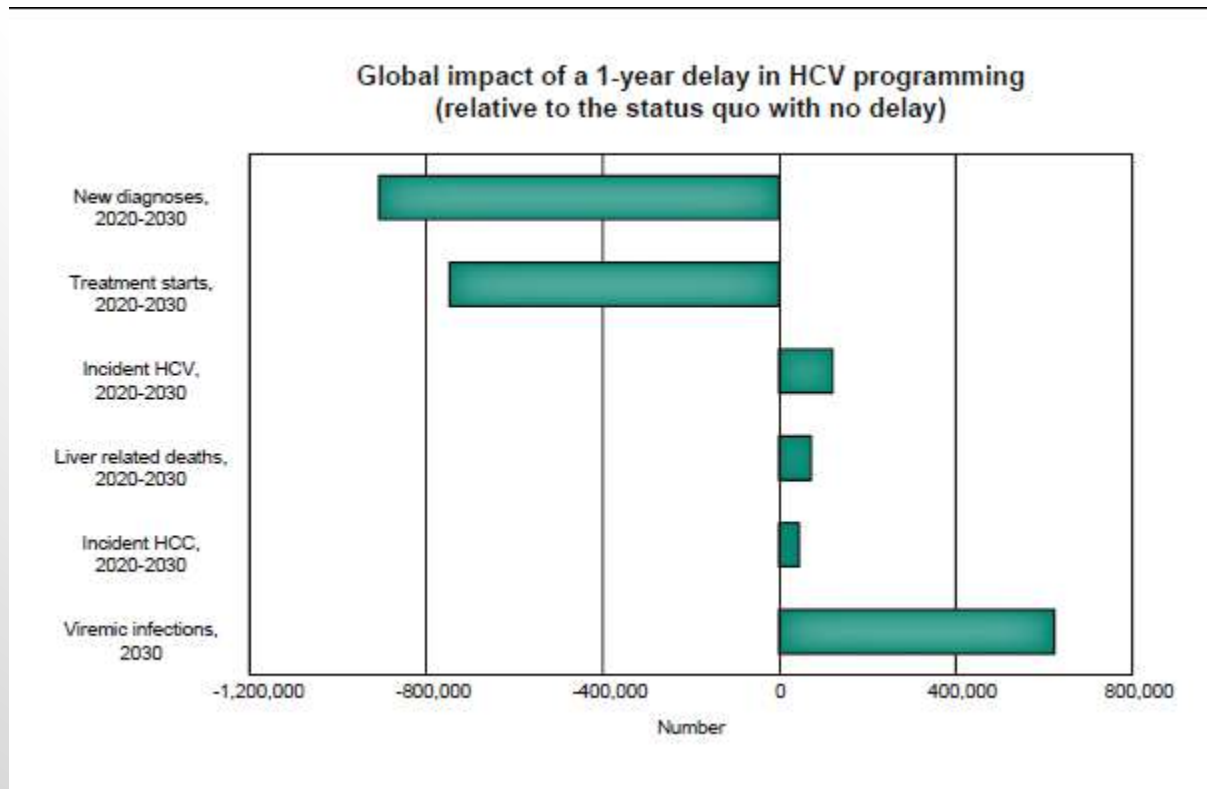
Sarah Blach^{1,*}, Loreta A. Kondili², Alessio Aghemo^{3,4}, Zongzhen Cai¹, Ellen Dugan¹,
Chris Estes¹, Ivane Gamkrelidze¹, Siya Ma¹, Jean-Michel Pawlotsky^{5,6}, Devin Razavi-Shearer¹,
Homie Razavi¹, Imam Waked⁷, Stefan Zeuzem⁸, Antonio Craxi⁹

¹Center for Disease Analysis Foundation, Lafayette, CO, USA; ²National Center for Global Health-Istituto Superiore di Sanità, Rome, Italy; ³Internal Medicine and Hepatology Division, Humanitas Clinical and Research Center – IRCCS, Rozzano, Milan, Italy; ⁴Humanitas University, Department of Biomedical Sciences, Milan, Italy; ⁵National Reference Center for Viral Hepatitis B, C and D, Department of Virology, Hôpital Henri Mondor, Créteil, France; ⁶INSERM U955, Créteil, France; ⁷National Liver Institute, Menoufia University, Al Minufya, Egypt; ⁸Internal Medicine Department, Goethe University Hospital, Frankfurt, Germany; ⁹Gastroenterology and Hepatology Unit, Department of Internal Medicine and Medical Specialties, University of Palermo, Palermo, Italy

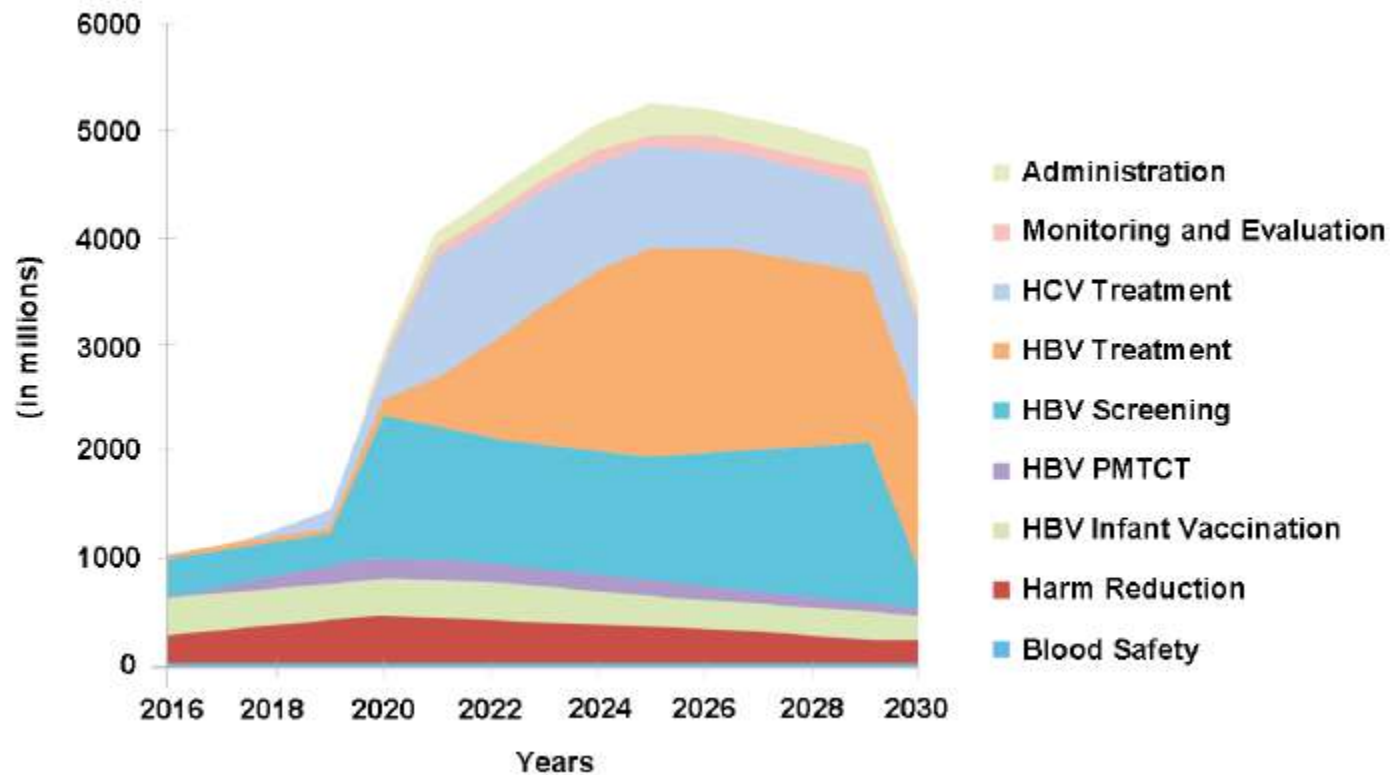
- 110 ülkenin dahil edildiği bir modelleme çalışması,
- Tarama, tanı, tedavi basamaklarında 1 yıllık gecikme senaryosunun 2020-2030 yılları arasına etkisi



- Yeni tanı konan hasta sayısında 906 000 azalma,
- Yeni başlanan tedavi sayısında 746 000 azalma,
- HCV insidansında 121 000 artış,



- Fazladan viremik infeksiyon 623 000,
- Fazladan HCC 44 800,
- Fazladan karaciğer ilişkili ölüm 72 200



- 2021-2030 yılları arasında 5 milyar USD/yıl,
- 2031, 3,5 milyar USD/yıl



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Gastroenterology

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World J Gastroenterol 2021 April 28; 27(16): 1728-1737

DOI: [10.3748/wjg.v27.i16.1728](https://doi.org/10.3748/wjg.v27.i16.1728)

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MINIREVIEWS

Hepatitis C virus micro-elimination: Where do we stand?

Alessandra Mangia, Rosa Cotugno, Giovanna Cocomazzi, Maria Maddalena Squillante, Valeria Piazzolla

- Covid-19 pandemisi sonrasında DSÖ hepatit eliminasyon hedefi ulaşılabilir değildir...

DSÖ 2020 HIV hedef ve gerçekleştirmeler

2020 HEDEF

2020 GERÇEKLEŞME

➤ HIV ilişkili nedenlerle
ölüm <500 000/yıl,

➤ 680 000

➤ Yeni HIV tanısı
<500 000/yıl

➤ 1 500 000

➤ 0-14 yaş çocuklarda sıfır
enfeksiyon

➤ 150 000



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Alessandra Mangia, Rosa Cotugno, Giovanna Cocomazzi, Maria Maddalena Squillante, Valeria Piazzolla

- HCV eliminasyonunun tanımlanmış toplum gruplarında yürütülmesine yönelik stratejiler geliştirilmesi daha ulaşılabilir bir hedeftir.

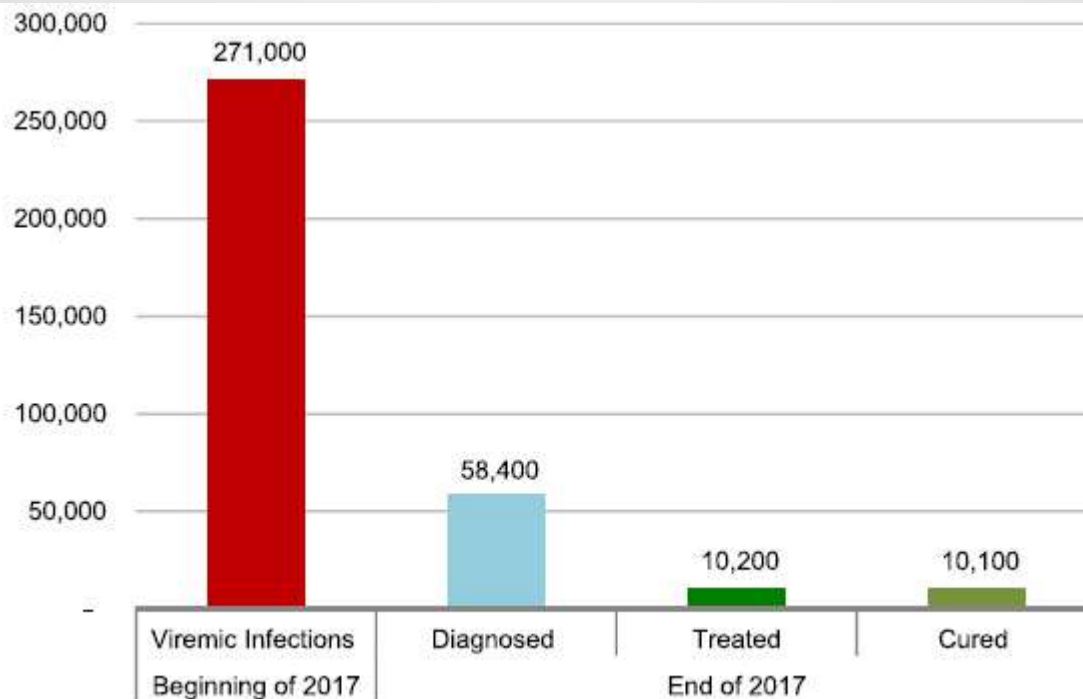
RESEARCH ARTICLE

Open Access

A micro-elimination approach to addressing hepatitis C in Turkey



Ramazan Idilman¹, Homie Razavi², Sarah Robbins-Scott², Ulus Salih Akarca³, Necati Örmeci¹, Sabahattin Kaymakoglu⁴, Bilgehan Aygen⁵, Nurdan Tozun⁶, Rahmet Güner⁷, Hurrem Bodur⁸ and Jeffrey V. Lazarus^{9,10*} 



RESEARCH ARTICLE

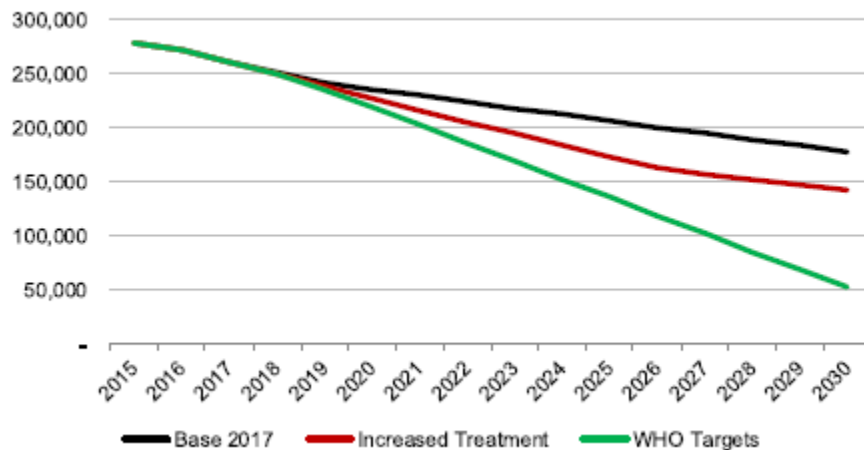
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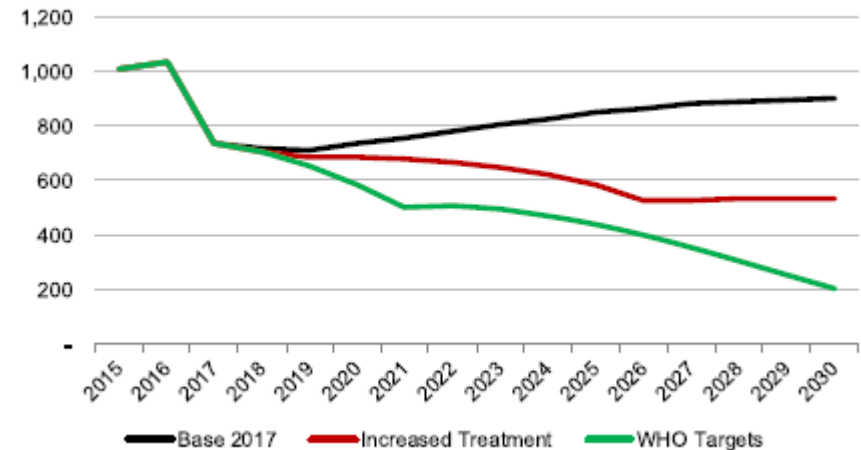


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Total Infected Cases (Viremic) — Turkey



Liver Related Deaths — Turkey



RESEARCH ARTICLE

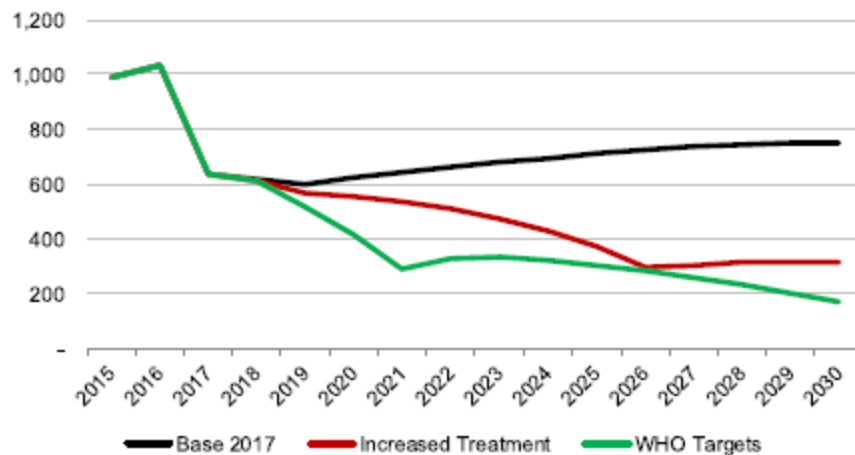
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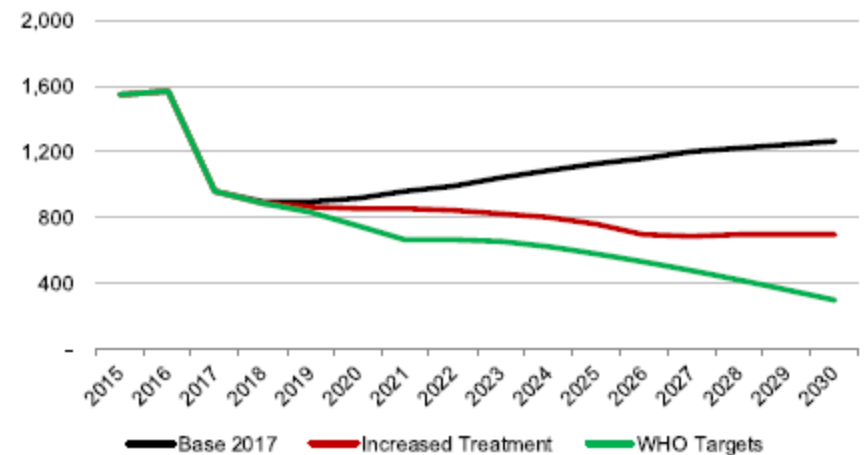


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HCC — Turkey



Decompensated Cirrhosis — Turkey



RESEARCH ARTICLE

Open Access

A micro-elimination approach to addressing hepatitis C in Turkey



Ramazan Idilman¹, Homie Razavi², Sarah Robbins-Scott², Ulus Salih Akarca³, Necati Örmeci¹, Sabahattin Kaymakoglu⁴, Bilgehan Aygen⁵, Nurdan Tozun⁶, Rahmet Güner⁷, Hurrem Bodur⁸ and Jeffrey V. Lazarus^{9,10*} 

- İlerlemiş karaciğer hastalığı olan hastalar,
- KBY, talasemi, hemofili, transplant alıcıları,
- Tanı almış ancak henüz tedavi edilmemiş hastalar,
- 1960 öncesi doğan bireyler,
- Belirli coğrafik bölgelerde yaşayanlar,
- Mahkumlar,
- Damar içi uyuşturucu kullanan bireyler

Original paper

Physician awareness of hepatitis C virus among different departments

Tolga Düzenli, Hüseyin Köseoğlu

Department of Gastroenterology, Hitit University Erol Olcok Training and Research Hospital, Merkez/Çorum, Turkey

- Ocak 2017 – Ocak 2020,
- 121 492 anti-HCV testi

Original paper

Physician awareness of hepatitis C virus among different departments

Tolga Düzenli, Hüseyin Köseoğlu

Department of Gastroenterology, Hitit University Erol Olcok Training and Research Hospital, Merkez/Çorum, Turkey

➤ Anti-HCV pozitif = 891

HCV RNA pozitif = 147 (%16,5)

HCV RNA negatif = 389 (%43,7)

HCV RNA bakılmayan = 355 (%39,8)

Original paper

Physician awareness of hepatitis C virus among different departments

Tolga Düzenli, Hüseyin Köseoğlu

Department of Gastroenterology, Hitit University Erol Olcok Training and Research Hospital, Merkez/Çorum, Turkey

➤ HCV RNA bakılmayan = 355

Dahili branş yatan hastalar %65,4

Dahili branş ayaktan hastalar %16,7

Cerrahi branş yatan hastalar %61

Cerrahi branş ayaktan hastalar %97

Sonuç olarak

- Pandemi hepatit eliminasyon programını olumsuz etkilemiştir,
Özellikle yeni vakaların tanısı ve tedavisine yönelik hedefler gerçekleştirilebilir olmaktan uzaklaşmıştır.
- Eliminasyon hedeflerine ulaşmak için, HCV tanı ve tedavi programlarının kapasitesini artırmaya yönelik acil bir çabaya gereksinim vardır,
Finansman ?

Sonuç olarak

- Eliminasyon programlarındaki aksama önümüzdeki 10 yılda hepatit ilişkili morbidite ve mortalite artışına yol açacaktır.
- Önümüzdeki yıllarda mikroeliminasyonun önceliklendirilerek hepatit eliminasyonu hedefi doğrultusunda ilerlenmesi akılcı olacaktır.