

Avrupa'da Tedaviye Eriřim ve Eriřimi Engelleleyen Unsurlar

Deniz Gökengin

Ege Üniversitesi Tıp Fakóltesi Enfeksiyon
Hastalıkları ve Klinik Mikrobiyoloji
Anabilim Dalı

Sunum Özeti

- Antiretroviral tedavinin yararları
- Avrupa'da HIV epidemiyolojisi
- Bölgede ART'ye erişim
- ART'ye erişimin önündeki engeller
- Sonuç

- Antiretroviral tedavi, HIV ile yaşıyan bireylerin yaşamında önemli ölçüde deęişikliğe neden olmuştur.



- Erken tanı ve tedavi ile yaşam beklentisi ve yaşam kalitesi artırmıştır.

1 Kitahata MM, et al. N Engl J Med 2009

2 May M, et al. BMJ 2011

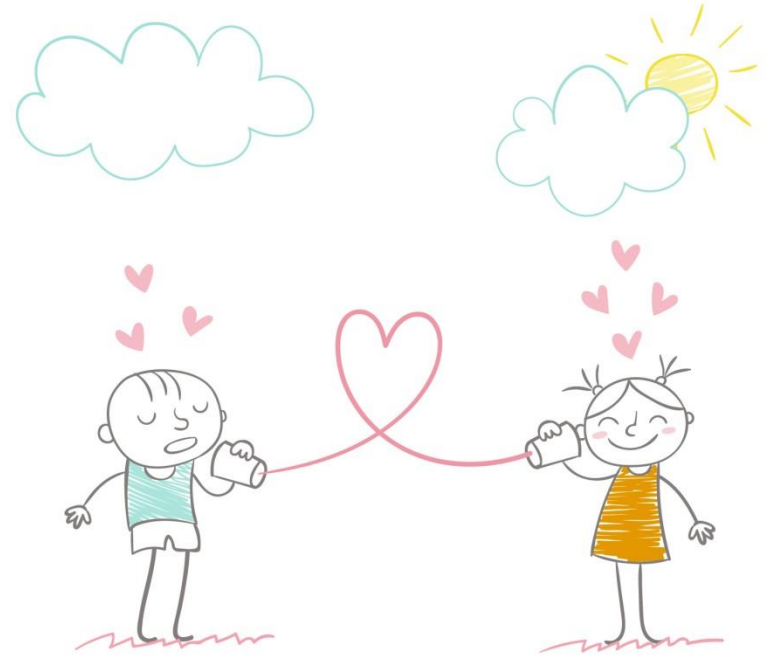
3 Kranzer K, et al. J Acquir Immune Defic Syndr 2013

4 May M, et al. J Int AIDS Soc 2012

5 Soria A, Lazzarin A. J Acquir Immune Defic Syndr 2007



- ART viral yükü ve bireyin enfektivitesini azaltır
- Tedaviye erişimi artırmak suretiyle HIV epidemisinin durdurulması söz konusu olabilir



- ART kullanan bireylerde riskli cinsel davranışların ve iğne paylaşımının azaldığı görülmüştür.



Desenclos J-C, et al. AIDS 1993
Kamb ML, et al. JAMA 1998
Gibson DR, et al. AIDS Behav 1999
Allen S, et al. AIDS 2003
Crepaz N, et al. AIDS 2006
Marks G, et al. J Acquired Immune Defic Syndr 2005
Marks G, et al. AIDS 2006

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VOL. 373 NO. 9

Initiation of Antiretroviral Therapy in Early Asymptomatic HIV Infection

The INSIGHT START Study Group*

ABSTRACT

BACKGROUND

Data from randomized trials are lacking on the benefits and risks of initiating antiretroviral therapy in patients with asymptomatic human immunodeficiency virus (HIV) infection who have a CD4+ count of more than 350 cells per cubic millimeter.

METHODS

We randomly assigned HIV-positive adults who had a CD4+ count of more than 500 cells per cubic millimeter to start antiretroviral therapy immediately (immediate-initiation group) or to defer it until the CD4+ count decreased to 350 cells per cubic millimeter or until the development of the acquired immunodeficiency syndrome (AIDS) or another condition that dictated the use of antiretroviral therapy (deferred-initiation group). The primary composite end point was any serious AIDS-related event, serious non-AIDS-related event, or death from any cause.

RESULTS

A total of 4685 patients were followed for a mean of 3.0 years. At study entry, the median HIV viral load was 12,759 copies per milliliter, and the median CD4+ count was 651 cells per cubic millimeter. On May 15, 2015, on the basis of an interim analysis, the data and safety monitoring board determined that the study question had been answered and recommended that patients in the deferred-initi-

The members of the writing group (Jens D. Lundgren, M.D. [cochair], Abdel G. Babiker, Ph.D. [cochair], Fred Gordin, M.D. [cochair], Sean Emery, Ph.D., Birgit Grund, Ph.D., Shweta Sharma, M.S., Anchalee Avihingsanon, M.D., David A. Cooper, M.D., Gerd Fätkenheuer, M.D., Josep M. Llibre, M.D., Jean-Michel Molina, M.D., Paula Munderi, M.D., Mauro Schechter, M.D., Robin Wood, M.D., Karin L. Klingman, M.D., Simon Collins, H. Clifford Lane, M.D., Andrew N. Phillips, Ph.D., and James D. Neaton, Ph.D. [INSIGHT PI]) of the INSIGHT START Study Group assume responsibility for the overall content and integrity of this article. The affiliations of the members of the writing group are listed in the Appendix. Address reprint requests to Dr. Lundgren at the Department of Infectious Diseases, Rigshospitalet, University of Copenhagen, Blegdamsvej 9, 2100 Copenhagen Ø, Denmark, or at jens.lundgren@regionh.dk.

Special Communication

Antiretroviral Treatment of Adult HIV Infection 2014 Recommendations of the International Antiviral Society-USA Panel

Hallbyth T, Gierhard MD, Judith A, Berg MD, Joseph J, Don MD, Jennifer F, Hoy MBBS, FRACP, Amato Talenti MD, PhD, Constance A, Benson MD, David M, Burger, PharmD, PhD, Pedro Cahn, MD, PhD, Joel E, Gallant MD, MPH, Marshall J, Glesby MD, PhD, Peter Reiss, MD, PhD, Michael S, Saag MD, David L, Thomas MD, MPH, Doreen M, Jacobsen, BS, Paul A, Volberding MD

IMPORTANCE New data and antiretroviral regimens expand treatment choices in resource-rich settings and warrant an update of recommendations to treat adults infected with human immunodeficiency virus (HIV).

OBJECTIVE To provide updated treatment recommendations for adults with HIV, emphasizing when to start treatment, what treatment to start, the use of laboratory monitoring tools, and managing treatment failure, switches, and simplification.

DATA SOURCES, STUDY SELECTION, AND DATA SYNTHESIS An International Antiviral Society-USA panel of experts in HIV research and patient care considered previous data and reviewed new data since the 2012 update with literature searches in PubMed and EMBASE through June 2014. Recommendations and ratings were based on the quality of evidence and consensus.

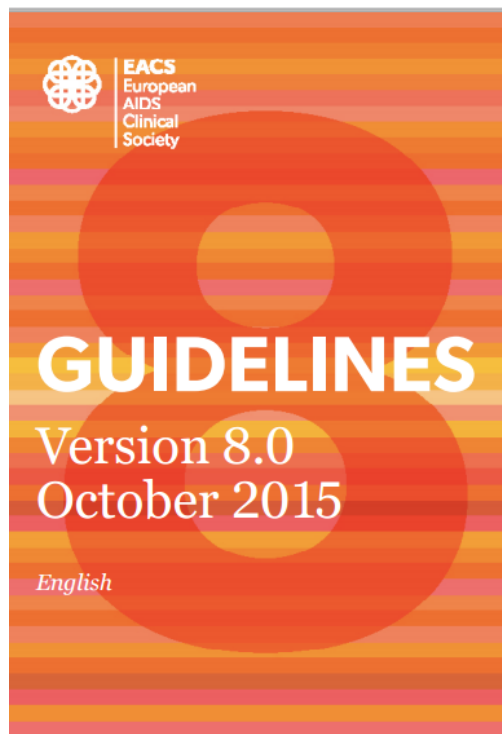
RESULTS Antiretroviral therapy is recommended for all adults with HIV infection. Evidence for benefits of treatment and quality of available data increase at lower CD4 cell counts. Recommended initial regimens include 2 nucleoside reverse transcriptase inhibitors (NRTIs): abacavir/lamivudine or tenofovir disoproxil fumarate/emtricitabine and a third single or boosted drug, which should be an integrase strand transfer inhibitor (dolutegravir, elvitegravir, or raltegravir), a nonnucleoside reverse transcriptase inhibitor (efavirenz or rilpivirine) or a boosted protease inhibitor (darunavir or atazanavir). Alternative regimens are available. Boosted protease inhibitor monotherapy is generally not recommended, but NRTI-sparing approaches may be considered. New guidance for optimal timing of monitoring of laboratory parameters is provided. Suspected treatment failure warrants rapid confirmation, performance of resistance testing while the patient is receiving the failing regimen, and evaluation of reasons for failure before consideration of switching therapy. Regimen switches for adverse effects, convenience, or to reduce costs should not jeopardize antiretroviral potency.

CONCLUSIONS AND RELEVANCE After confirmed diagnosis of HIV infection, antiretroviral therapy should be initiated in all individuals who are willing and ready to start treatment. Regimens should be selected or changed based on resistance test results with consideration of dosing frequency, pill burden, adverse toxic effect profiles, comorbidities, and drug interactions.

Related article page 390
Supplemental content at
jama.com



JAMA. 2014;312(6):410-425. doi:10.1001/jama



Statement by the HHS Panel on Antiretroviral Guidelines for Adults and Adolescents regarding results from the START and TEMPRANO trials

A A Text Size

Statement by the HHS Panel on Antiretroviral Guidelines for Adults and Adolescents Regarding Results from the START and TEMPRANO Trials

Date: July 28, 2015

Source: *AIDSinfo*

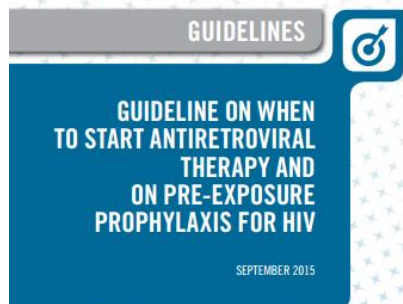
Results for two pivotal randomized controlled trials (START¹ and TEMPRANO²) were recently published, both demonstrating that the clinical benefits of antiretroviral therapy (ART) are greater when ART is started early, with pre-treatment CD4 T lymphocyte (CD4) counts >500 cells/mm³, than when initiated at a lower CD4 cell count threshold. The Panel already recommends ART for all HIV-infected patients to reduce the risk of disease progression. However, until the results of these two studies became available, the Panel's recommendations for starting ART in patients with CD4 cell counts 350 to 500 cells/mm³ (AII)³ and >500 cells/mm³ (BIII)³ were primarily based on data from observational cohort studies and expert opinion.

With the availability of the START and TEMPRANO trial results, the Panel's overall recommendation remains the same: ART is recommended for all HIV-infected patients regardless of pre-treatment CD4 count. However, the strength of the recommendation will be changed to A* (strong recommendation based on data from randomized controlled trials) for all patients.

The additional benefit of ART in reducing the risk of HIV transmission further underscores the potential public health value of this recommendation. The Panel continues to emphasize that patients starting ART should be willing and able to commit to treatment and to understand the benefits and risks of therapy and the importance of adherence. On a case-by-case basis, ART may be deferred because of clinical and/or psychosocial factors, but therapy should be initiated as soon as is feasible.

It should be noted that neither of these trials included adolescents. However, our recommendations have been extrapolated to adolescents based on the expectation that they will derive benefits from early ART similar to those observed in adults.

Below are summaries of the results from these two randomized controlled trials.



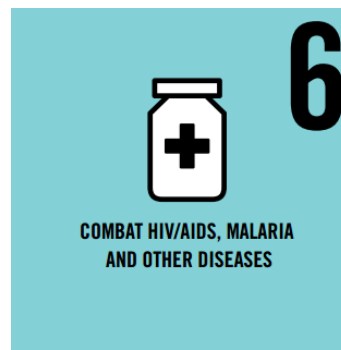
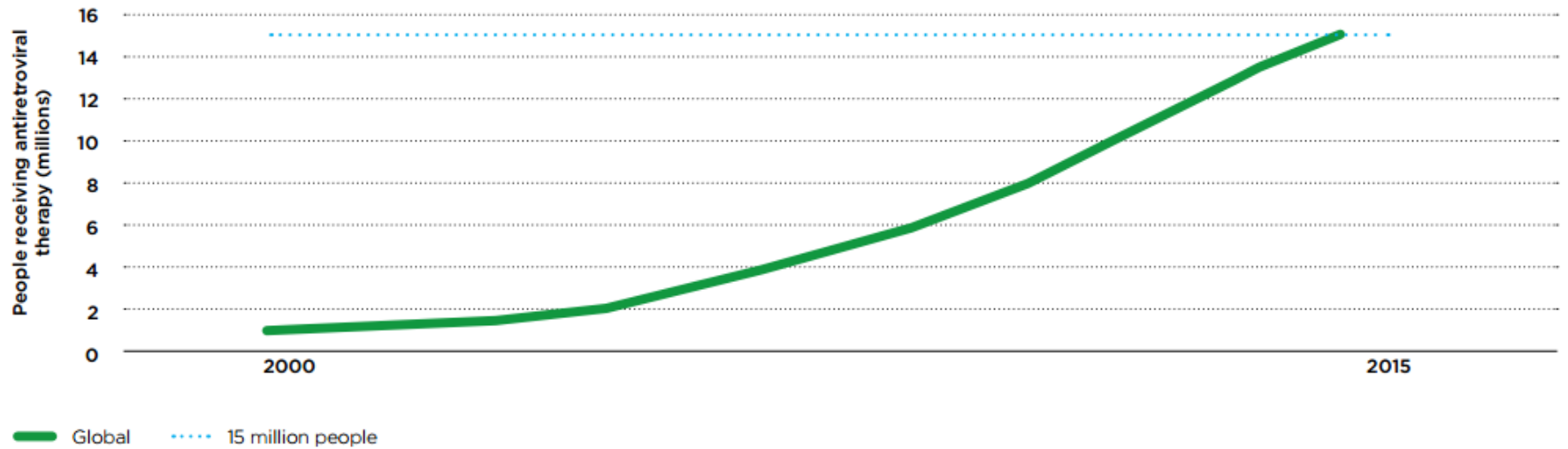


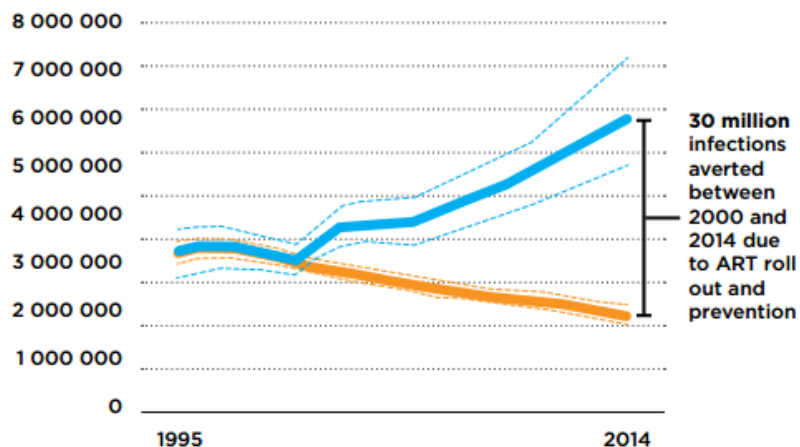
Figure 24

Number of people receiving antiretroviral therapy, December 2000–March 2015



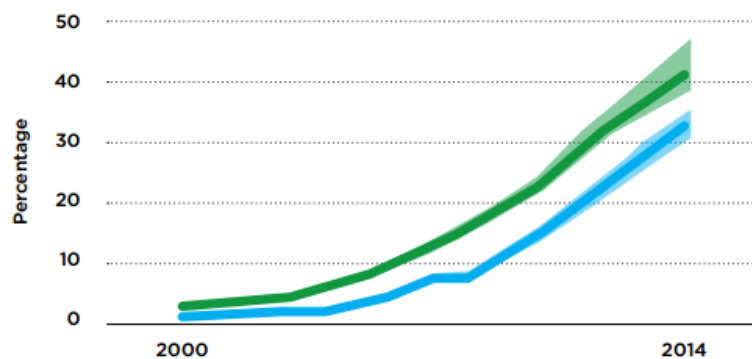
Source: UNAIDS 2014 estimates. Numbers receiving antiretroviral therapy through March 2015 provided by selected countries in sub-Saharan Africa.

New HIV infections



— New infections assuming 2000 ART coverage levels and no prevention
— New HIV infections

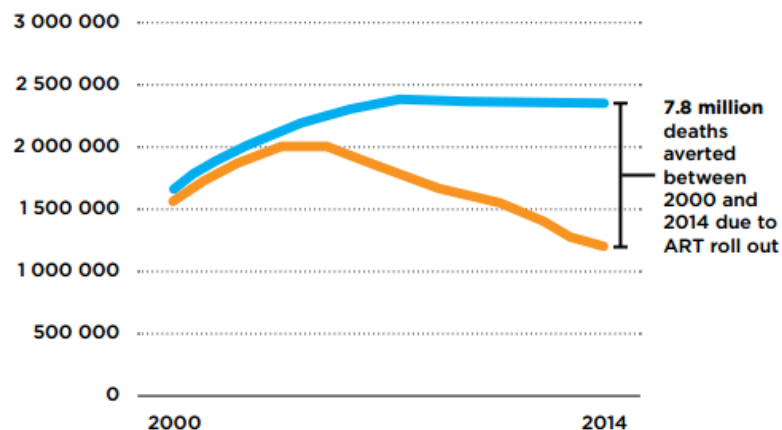
Antiretroviral therapy coverage in adults and children, 2000-2014



— Adults (15+ years)
— Children (0-14 years)

Source: UNAIDS 2014 estimates.

AIDS deaths, global, 2000-2014

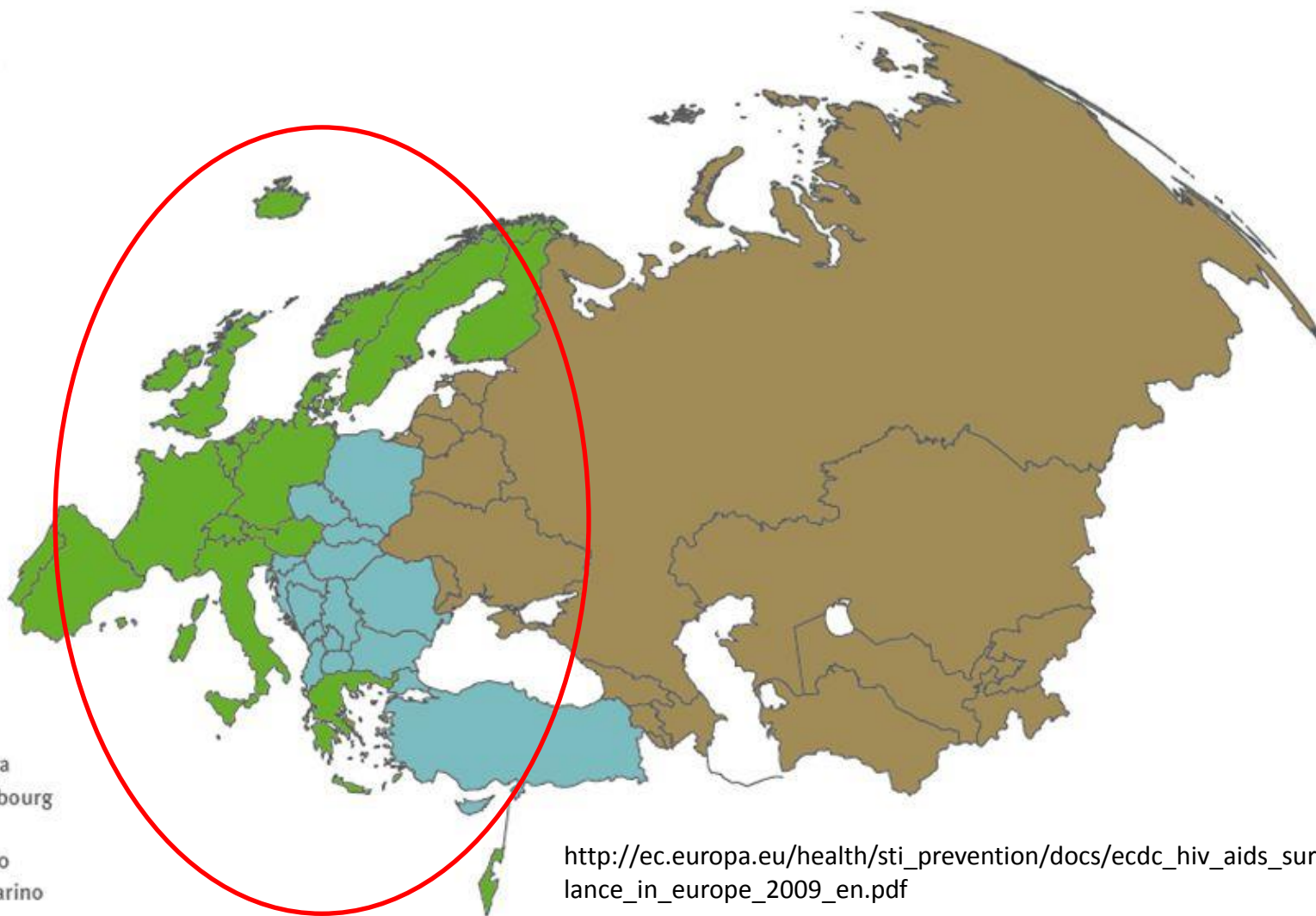


— AIDS-related deaths assuming 2000 ART coverage levels
— Reported AIDS-related deaths

http://www.unaids.org/sites/default/files/media_asset/MDG6Report_en.pdf

West
Centre
East

Andorra
Luxembourg
Malta
Monaco
San Marino

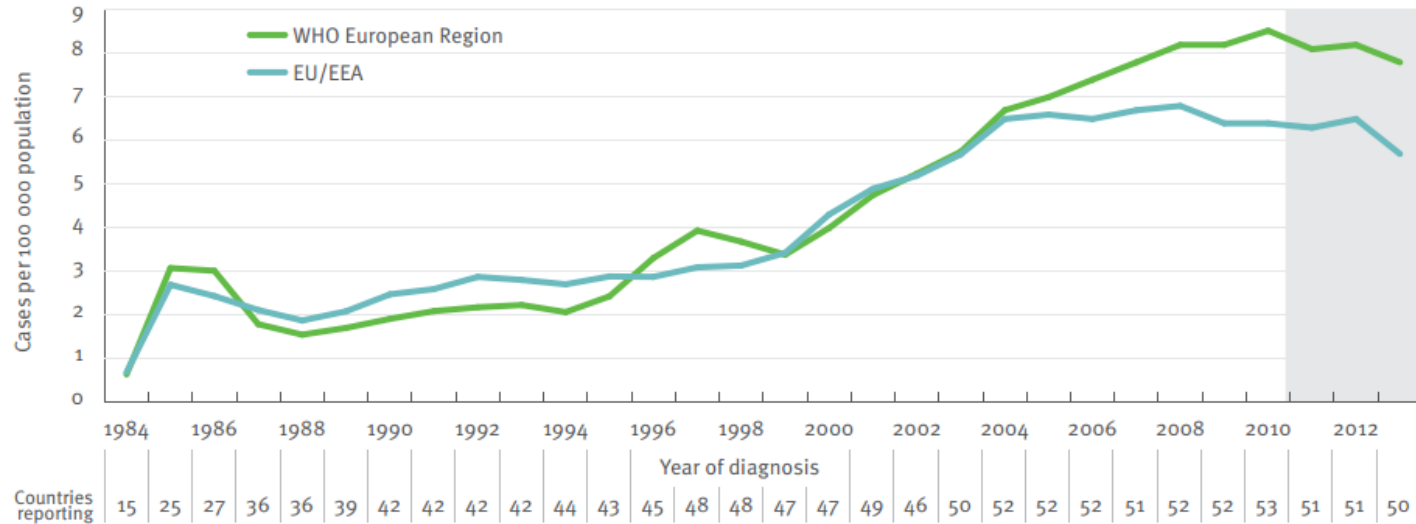


http://ec.europa.eu/health/sti_prevention/docs/ecdc_hiv_aids_surveillance_in_europe_2009_en.pdf

ECDC HIV in Europe 2009;

West=23 countries, Center: 15 countries, East=15 countries // Total:53// EU: 27

AB/AEA ve DSÖ Avrupa Bölgesi'nde tanı yılına göre her 100 000 kişiye düşen yeni HIV tanılarının hızı, 1984-2013



DSÖ Avrupa Bölgesi'nde 51*/53 ülkede 136 235 yeni HIV enfeksiyonu

Birlikli sayı 1 715 344

Genel oran

7,8 / 100 000 DSÖ Avrupa Bölgesi

5,7 / 100 000 AB/AEA

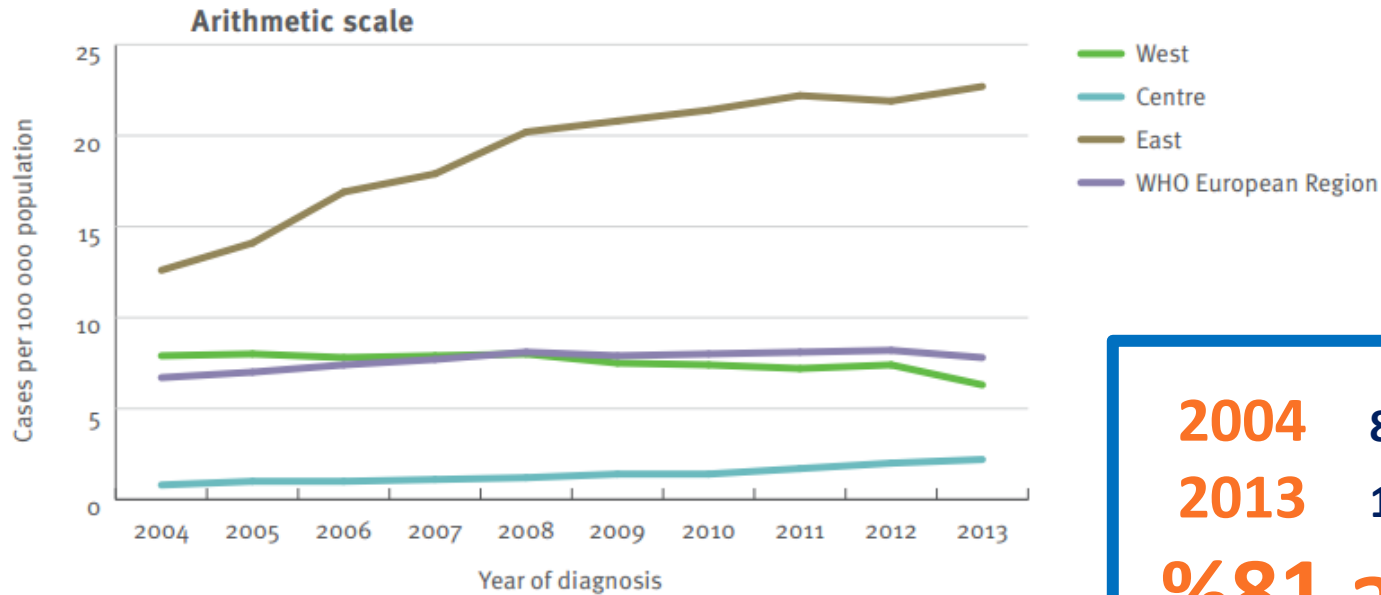
15,7 / 100 000 Rusya dahil

*Özbekistan ve Türkmenistan'dan veri yok

Adapted from HIV/AIDS Surveillance in Europe 2013

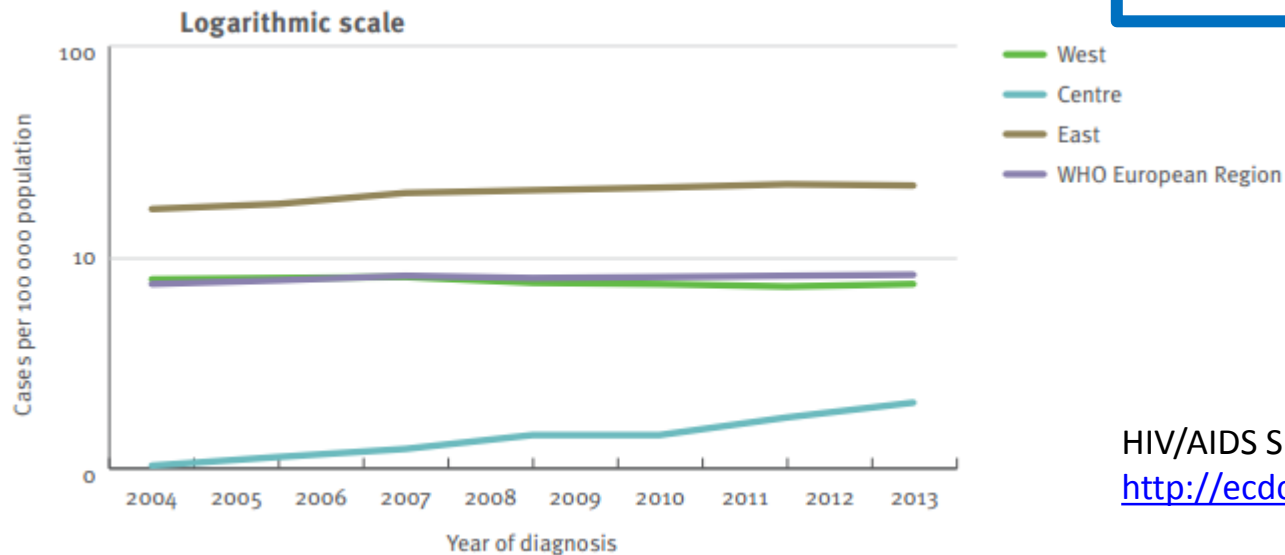
<http://ecdc.europa.eu/en>

DSÖ Avrupa Bölgesi'nde 2004-2013 yılları arasında yeni HIV tanıları



2004 8.7/100.000
2013 15.7/100.000

%81 artış



HIV/AIDS Surveillance in Europe 2013
<http://ecdc.europa.eu/en>

- 19 AB ülkesinde artış %27
- Diğer ülkelerde artış 3 kata yakın

329 609

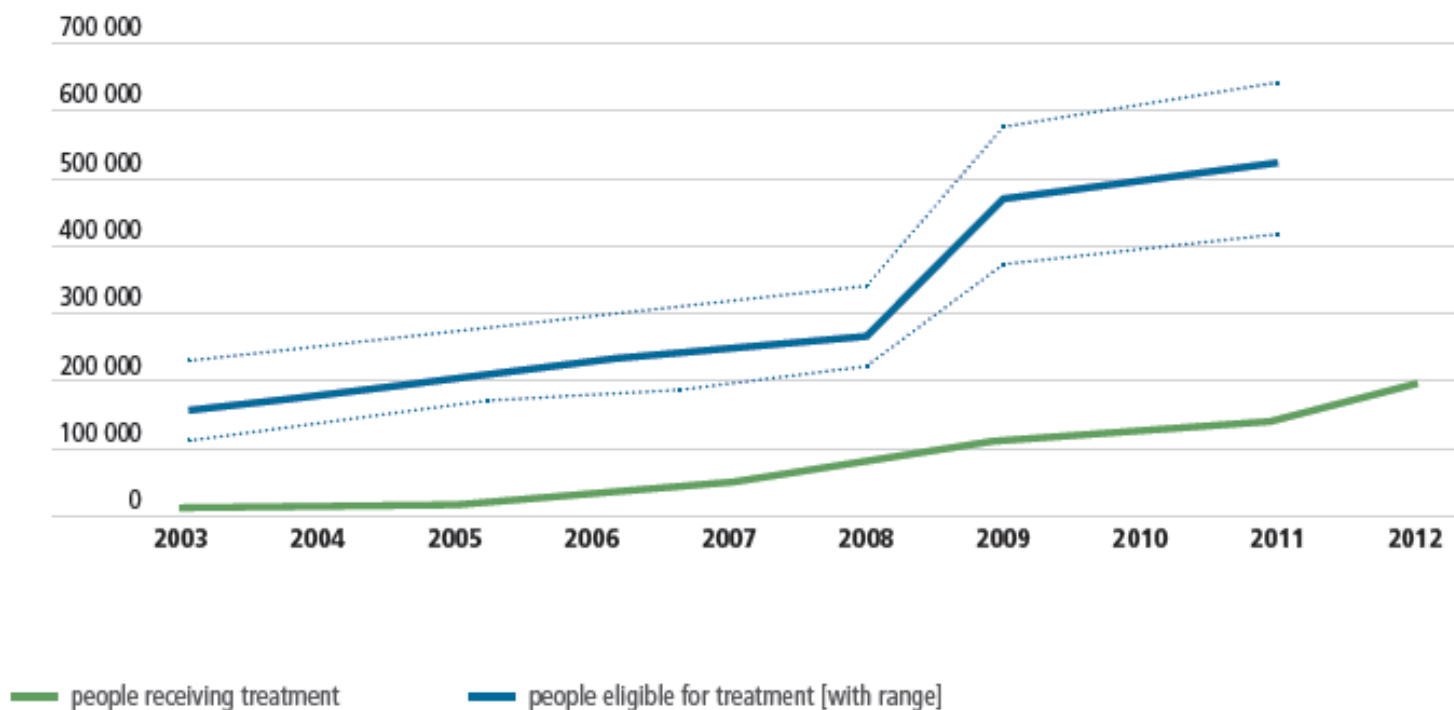
*Numbers on ART in 33 countries
reported to previous round of
Dublin reporting (2010)*

512 134

*Numbers on ART in same
33 countries reported to this round
of Dublin reporting (2012)*

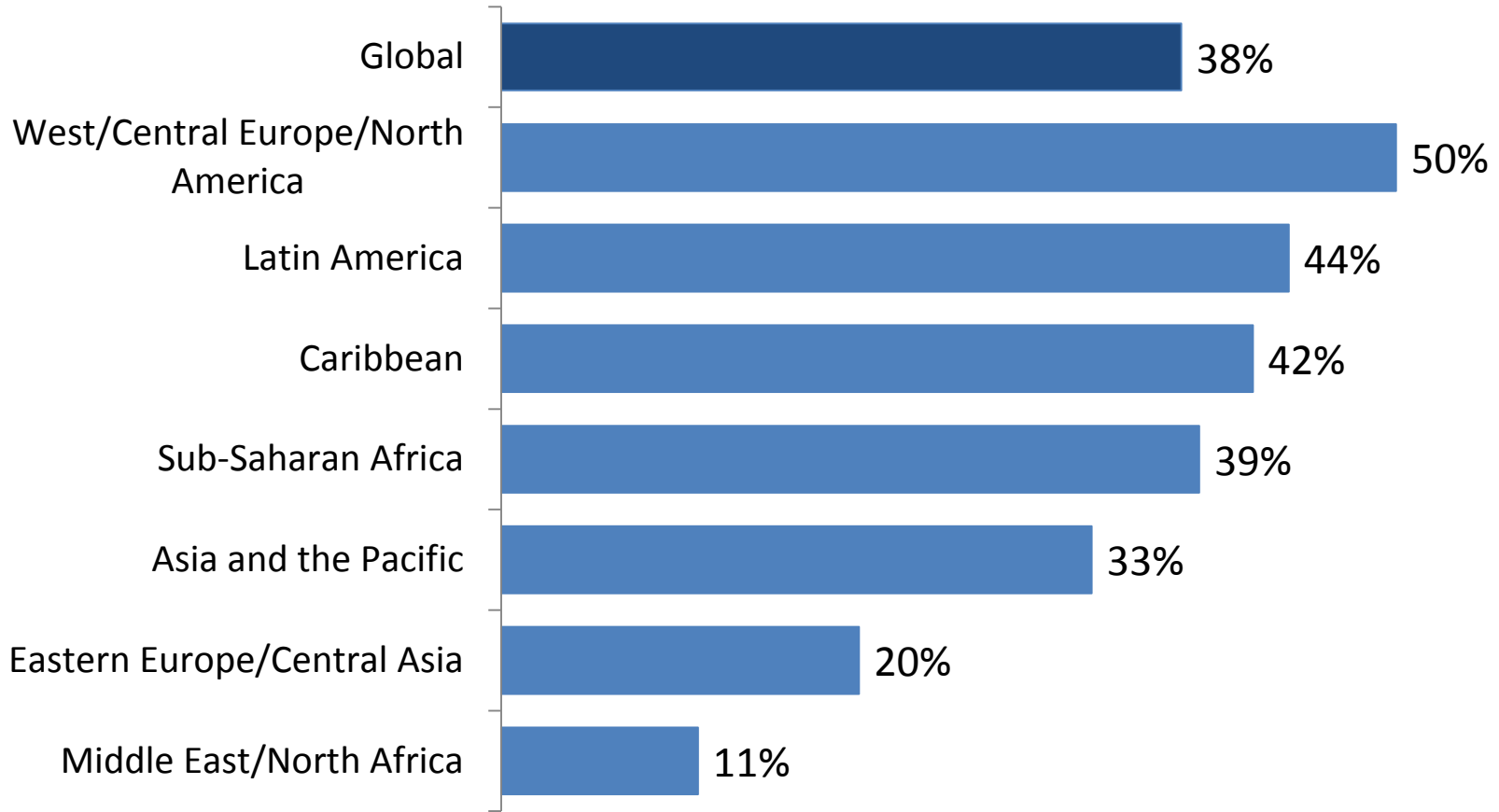
**Data for 33 countries with data available for both rounds of reporting.*

Fig. 1.8. Adults and children eligible for and receiving antiretroviral therapy in low- and middle-income countries in the WHO European Region, 2003–2012



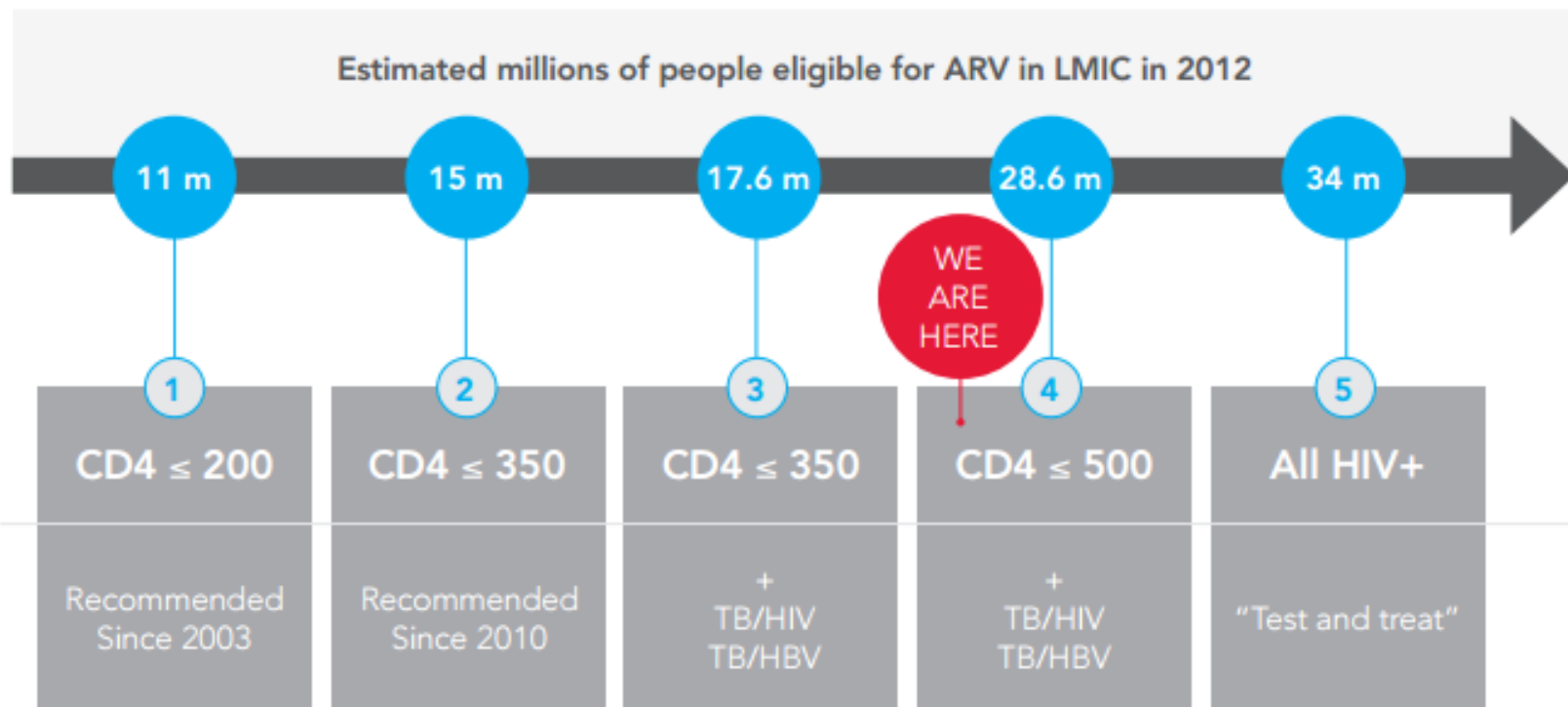
Source: 2013 Global AIDS Response Reporting (WHO/UNICEF/UNAIDS) and 2012 UNAIDS/WHO estimates.

Antiretroviral Tedavi Kullanan Eriřkinlerin Blgelere Gre Daėılımı (2013)



ART kullanan erişkinlerin tahmini sayısı = 12,1 milyon

SCENARIOS OF ANTIRETROVIRAL TREATMENT ELIGIBILITY: WHO VISION



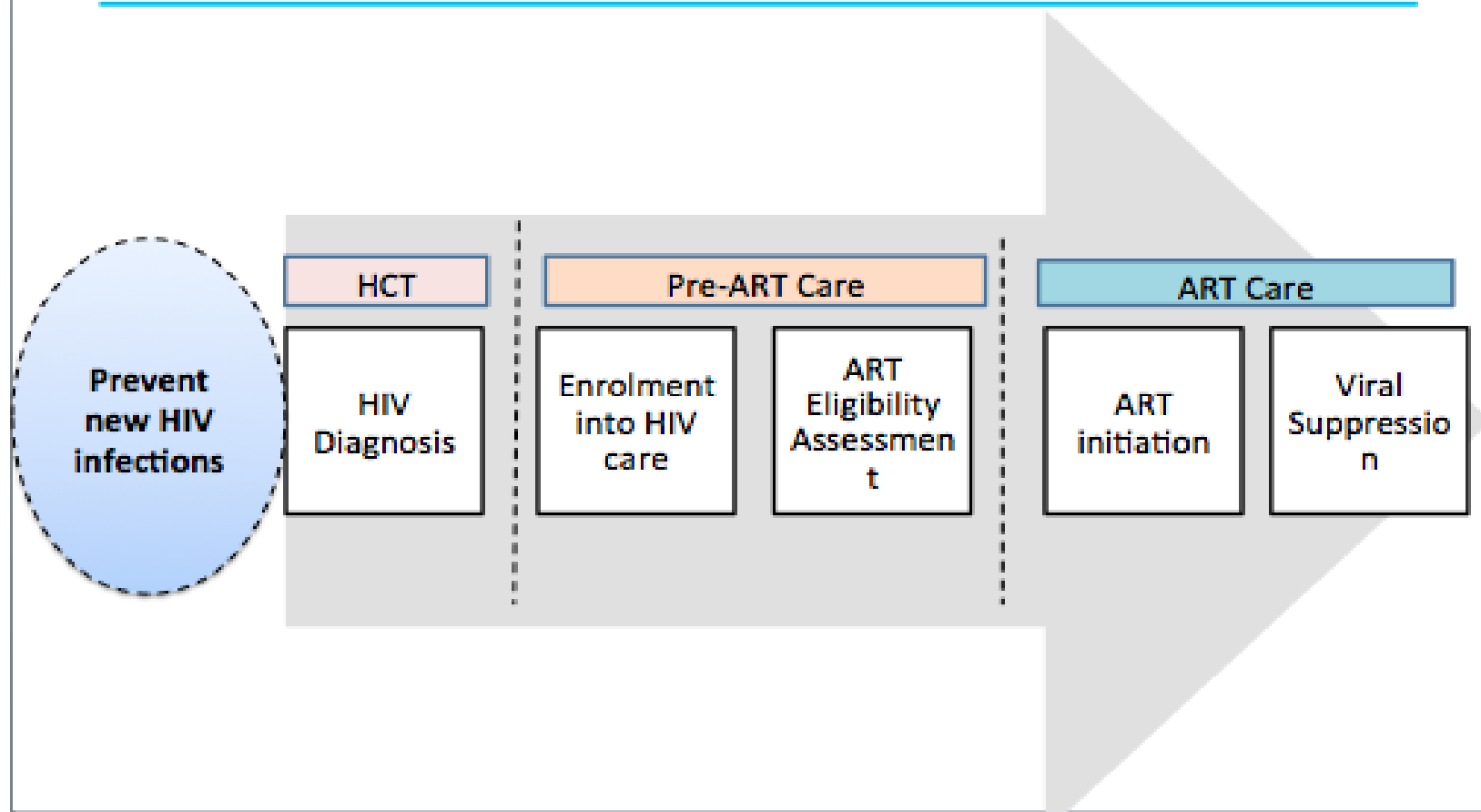
Scenarios of ARV eligibility

ART regardless of CD4 count for:

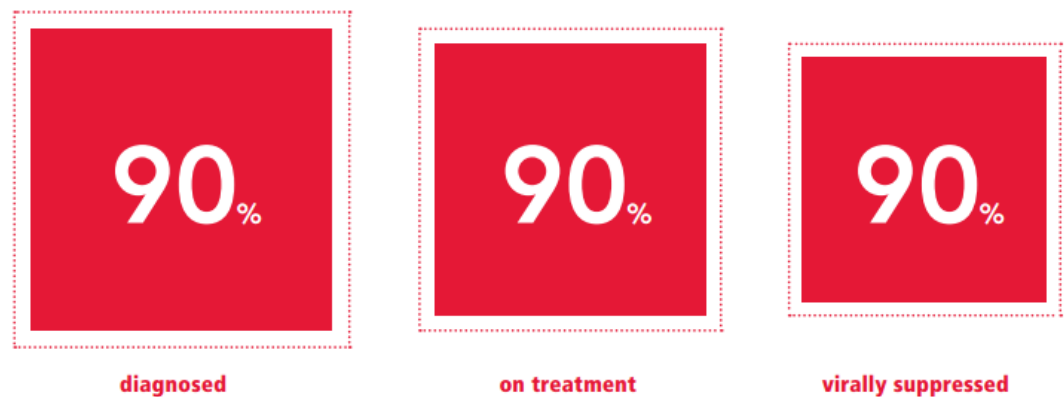
- Serodiscordant couples
- Pregnant women
- Children < 5 years

Source: WHO 2014

HIV Care Continuum



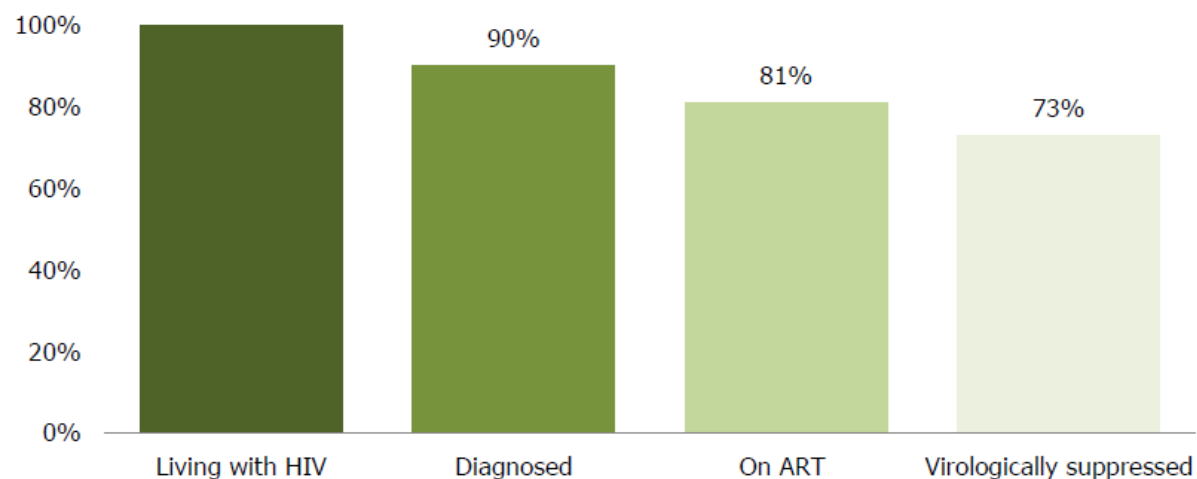
THE TREATMENT TARGET



SPECIAL REPORT

Dublin Declaration 2014 progress report – HIV continuum of care

Figure 3. Pictorial depiction of 90–90–90 targets



http://www.unaids.org/sites/default/files/media_asset/90-90-90_en_0.pdf

ECDC Thematic Report: HIV continuum of care 2014

Oral Presentation – Abstract O237

Large disparities in HIV treatment cascades between eight European and high-income countries – analysis of break points

Raymond, Alice¹; Hill, Andrew² and Pozniak, Anton³

¹Department of Public Health, Imperial College London, London, UK. ²Molecular and Clinical Pharmacology, Liverpool University, Liverpool, UK. ³St Stephens Centre, Chelsea and Westminster Hospital, London, UK.

Table 1. HIV treatment cascades in eight European and high-income countries

Countries	France	Netherlands	United States	United Kingdom	Australia	British Columbia	Denmark	Georgia
Number living with HIV	149,900	25,000	1,148,200	98,400	33,000	11,700	6500	4900
Percentage diagnosed	81	—	82	—	75	71	85	52
Percentage linked to care	> 74	73	66	79	—	67	81	44
Percentage on ART	> 60	59	33	67	35	51	62	26
Percentage with undetectable HIV RNA	52	53	25	58	32	35	59	20

HIV Care in the Swedish-Danish HIV Cohort 1995-2010, Closing the Gaps

Marie Helleberg^{1,2*}, Amanda Häggblom^{3,4}, Anders Sönnernborg^{3,5}, Niels Obel¹

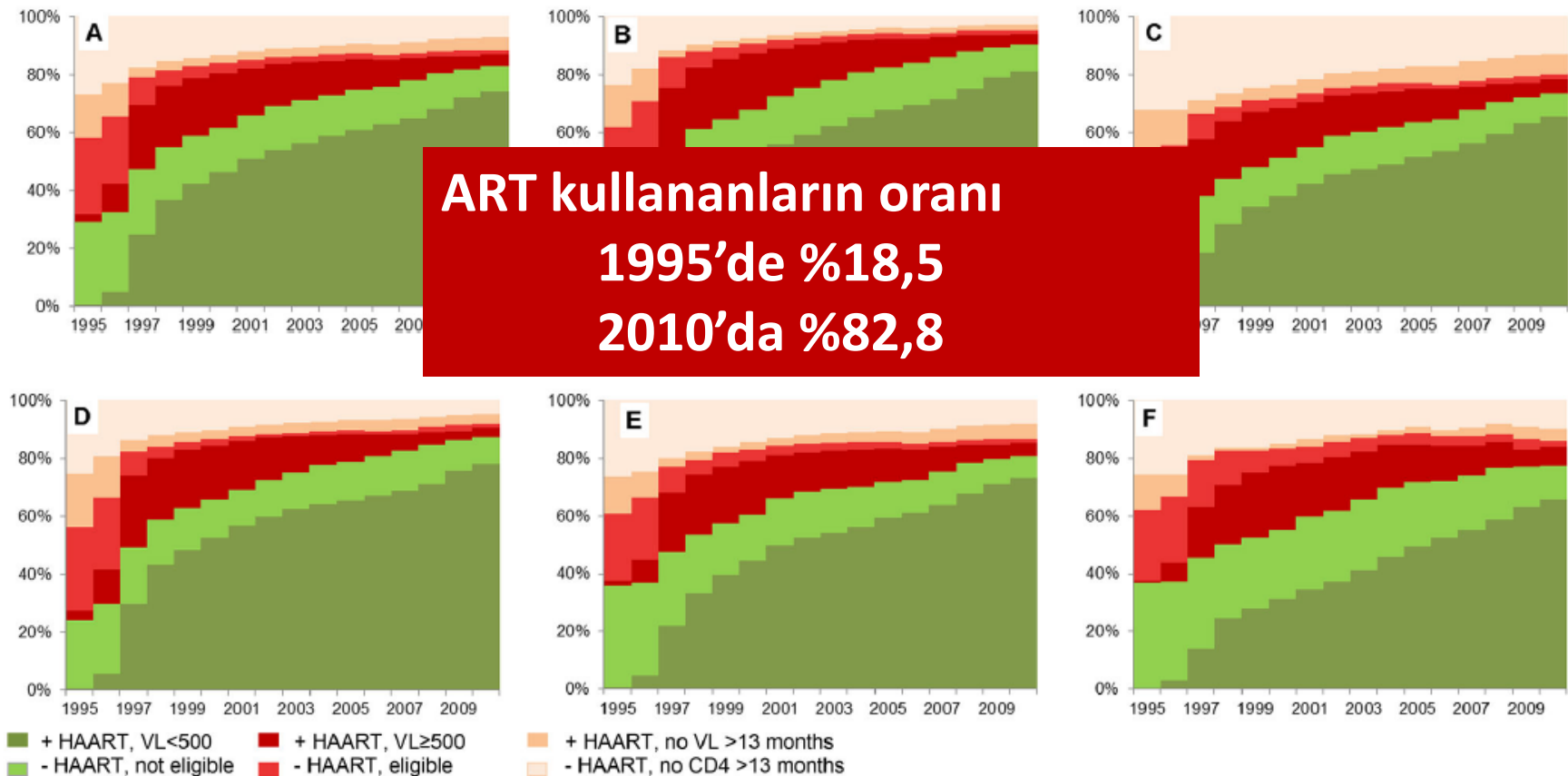
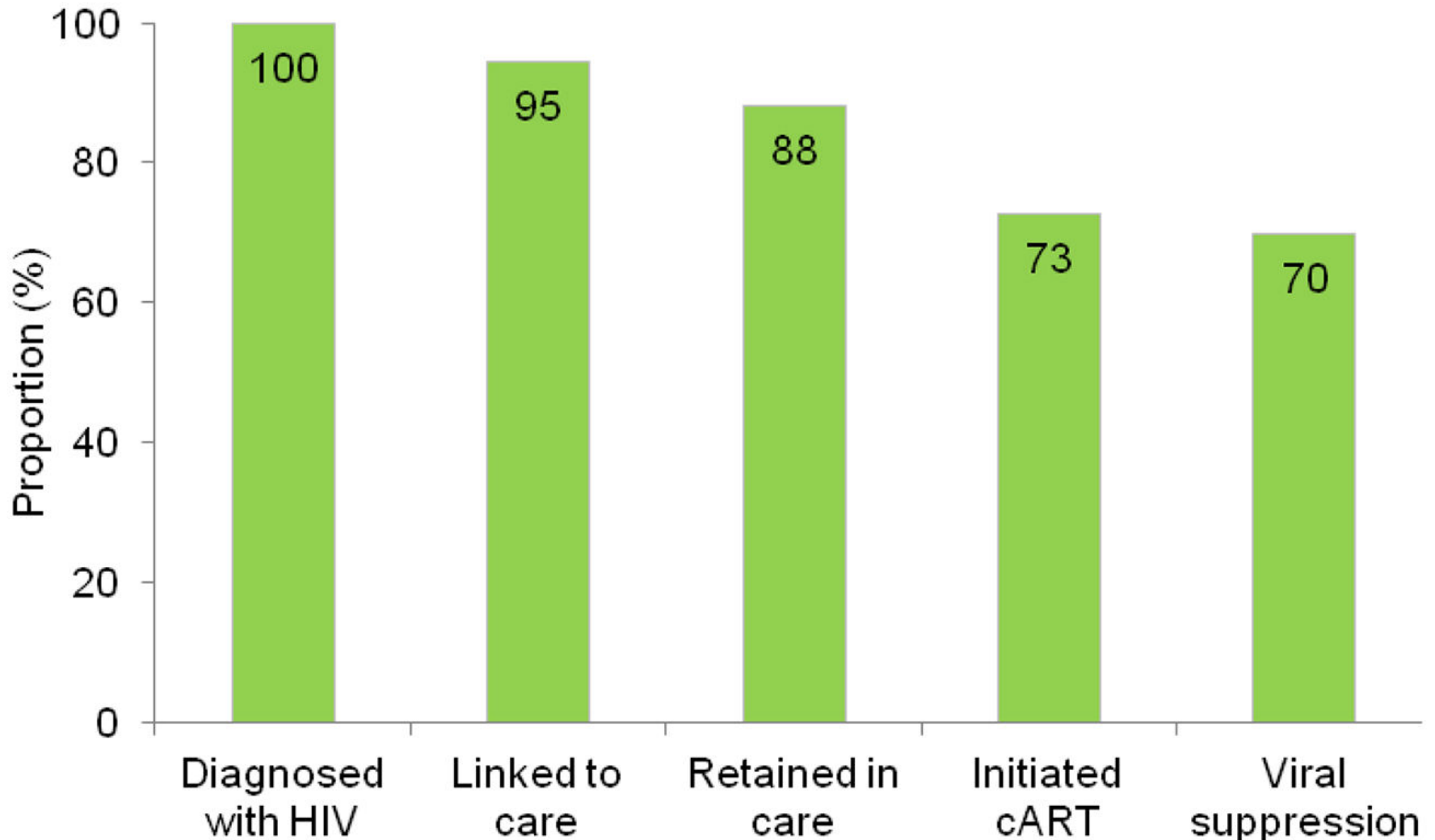


Figure 1. Treatment status of patients in the Swedish-Danish HIV cohort in the period 1995-2010. The panels represent all patients in the cohort (A) and stratified by origin (B: Swedish/Danish origin and C: Immigrants) and by route of HIV transmission (D: MSM, E: Heterosexuals and F: Injection drug users).

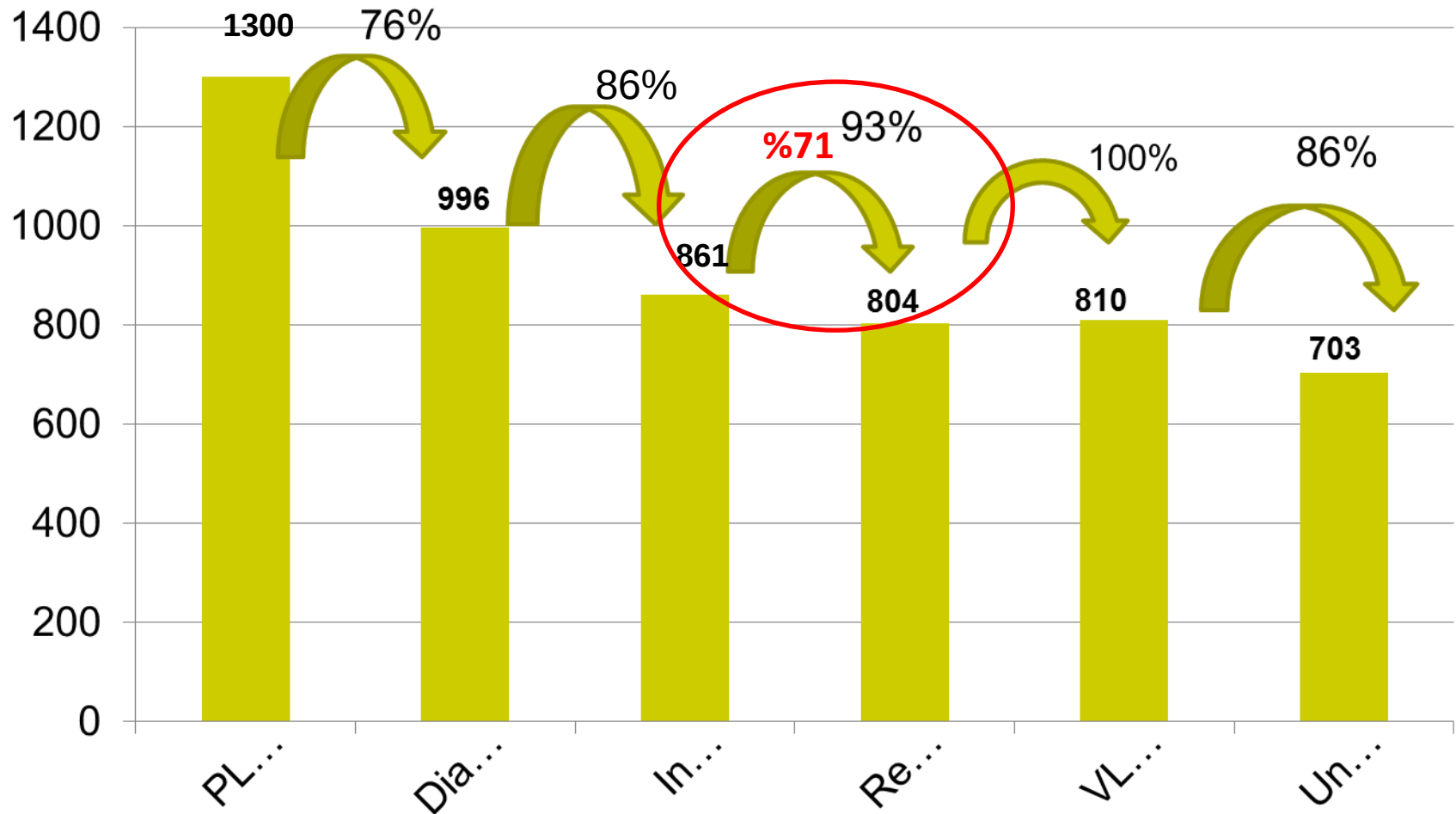
Danimarka'da HIV tedavi zinciri



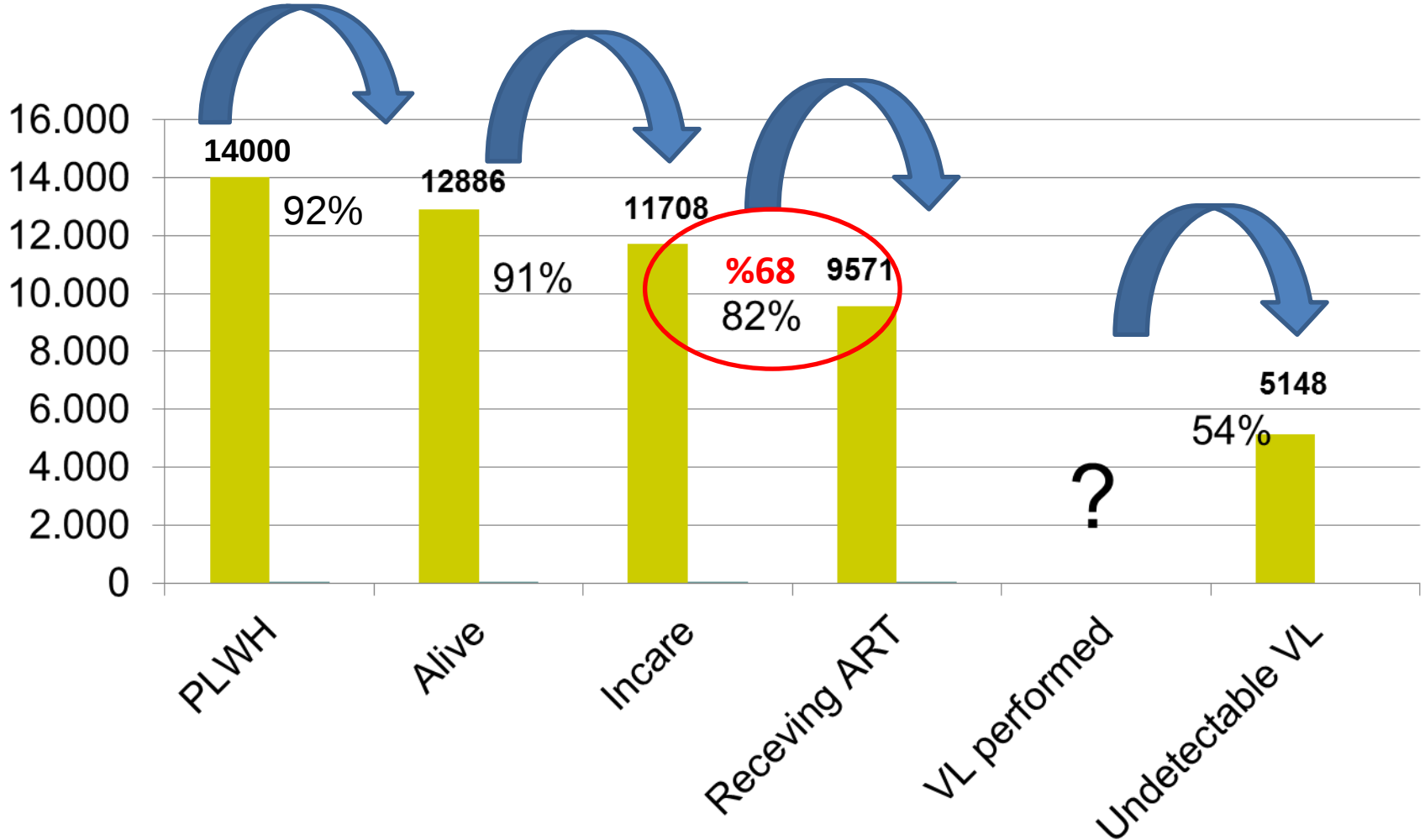
Viral baskılanma: <500 c/mL

Helleberg M, et al. PLOS One 2013

Hırvatistan'da HIV tedavi zinciri



Romanya'da HIV tedavi zinciri



*HIV ile yaşıyanların tahmini sayısına ilişkin veriler Ulusal HIV Enstitüsü'nün verileri kullanılarak elde edilmiştir

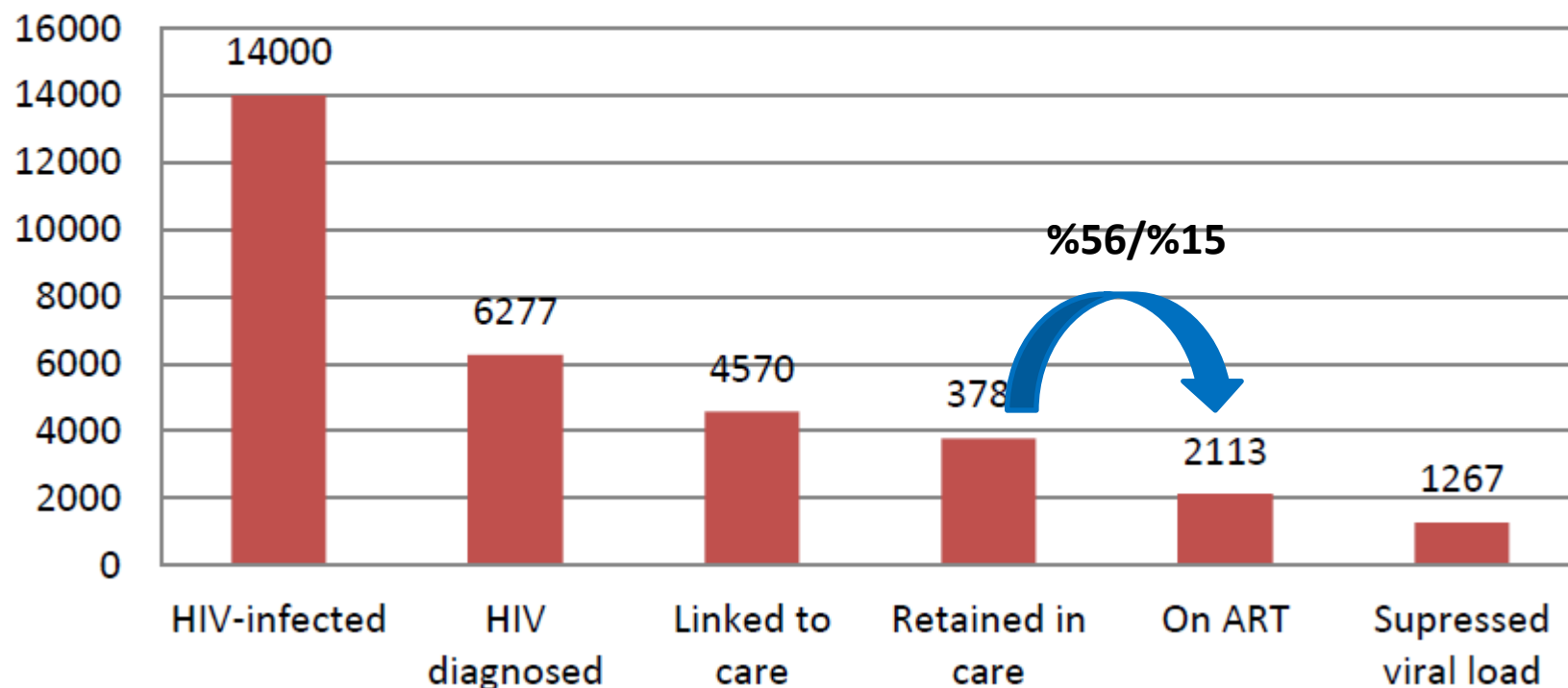
*Viral yük sınırı tanımlanmamıştır

Cristiana Oprea'nın izniyle

HIV Cascade of Care in Luhansk Region of Ukraine

A. Chuykov^{1,2}, Y. Lopatina³, Z. Shabarova⁴, R. Chekhtiani⁵, E. Zagainova⁵, T. Miroshnik⁵, Y. Troshchiy⁵, Y. Pihulya⁵, I. Zakharova⁵

HIV cascade of care, Luhansk oblast, Ukraine



ART'ye erişimin önündeki engeller

Risk factors, barriers and facilitators for linkage to antiretroviral therapy care: a systematic review

Darshini Govindasamy^a, Nathan Ford^{b,c} and Katharina Kranzer^d

Table 2. Areas for intervention.

Factor	Predictor of attrition	Barrier to care	Number of articles cited in	Referenced in
Economic				
Transport costs	Yes ●	Yes	13	[14,27,29,34,35,37,38,40,42,44–47]
Distance	Yes ●	Yes	9	[13–16,36,38,42,44,48]
Employed patients that are unable to take time off work for clinic visits		Yes	6	[14,15,38,40,47,49]
Food shortage		Yes	5	[36,37,39,41,44]
Patient-related time constraints		Yes	2	[14,38]
Psycho-social				
Stigma and fear of disclosure		Yes ●	14	[9,15,27,33–43]
Fear of drug toxicities		Yes	7	[15,27,34,36,39,41,42]
Perceived good health		Yes ●	5	[9,10,34,42,48]
Health systems				
Long clinic waiting times		Yes	7	[33–36,38,44,45]
Poor service received from healthcare workers		Yes	5	[33–35,37,38]
Shortage of healthcare workers	Yes	Yes	4	[16,36,43,44]
Inconvenient clinic hours		Yes	2	[34,38]
Medical				
Advanced immunodeficiency	Yes ●		5	[20,22,24,26,27]
On tuberculosis therapy/co-infected with tuberculosis	Yes	Yes	4	[22,40,43,46]
Pregnancy	Yes		2	[21,25]
Severe malnutrition	Yes		2	[22,28]
Other				
Male sex	Yes ●		7	[16–18,23,24,27,31]
Younger age	Yes ●		6	[17–19,22,25,31]
Low levels of education	Yes ●		2	[21,28]

Barriers to access to care reported by women living with HIV across 27 countries

Margaret Johnson^a, Anna Samarina^b, He Xi^c, José Valdez Ramalho Madruga^d, Laurent Hocqueloux^e, Mona Loutfy^f, Marie-Josée Fournelle^g, Michael Norton^g, Jean Van Wyk^{g*}, Woodie Zachry^g and Marisol Martinez^g

- **Bakım hizmetine ulaşmanın engelleri ölçeği (BACS)**
 - 12-maddelik ölçek
 - HIV-pozitif bireyler sağlık hizmetine dahil olmalarını engelleyen unsurları ve bunların şiddetini belirtiyor
- ≥2 anlamlı kabul edilmiş.

Table 1. Geographical disposition of patients.

Region	County	Number of sites	Number of patients enrolled
Global (<i>total</i>)		114	1931
WEC (<i>total</i>)		74	760
	Austria	3	18
	Canada	6	72
	France	8	82
	Germany	4	70
	Greece	4	40
	Ireland	1	20
	Israel	3	37
	Italy	6	99
	Netherlands	1	25
	Norway	3	21
	Portugal	6	93
	Spain	16	87
	Sweden	4	25
	Switzerland	2	27
	UK	7	44
CEE (<i>total</i>)		20	532
	Czech Republic	3	20
	Estonia	3	99
	Romania	8	200
	Russia	5	171
	Slovenia	1	42
LA (<i>total</i>)		17	519
	Argentina	3	101
	Brazil	1	90
	Chile	1	50
	Columbia	6	84
	Mexico	2	115
	Venezuela	4	79
Asia (<i>total</i>)		3	120
	China	3	120

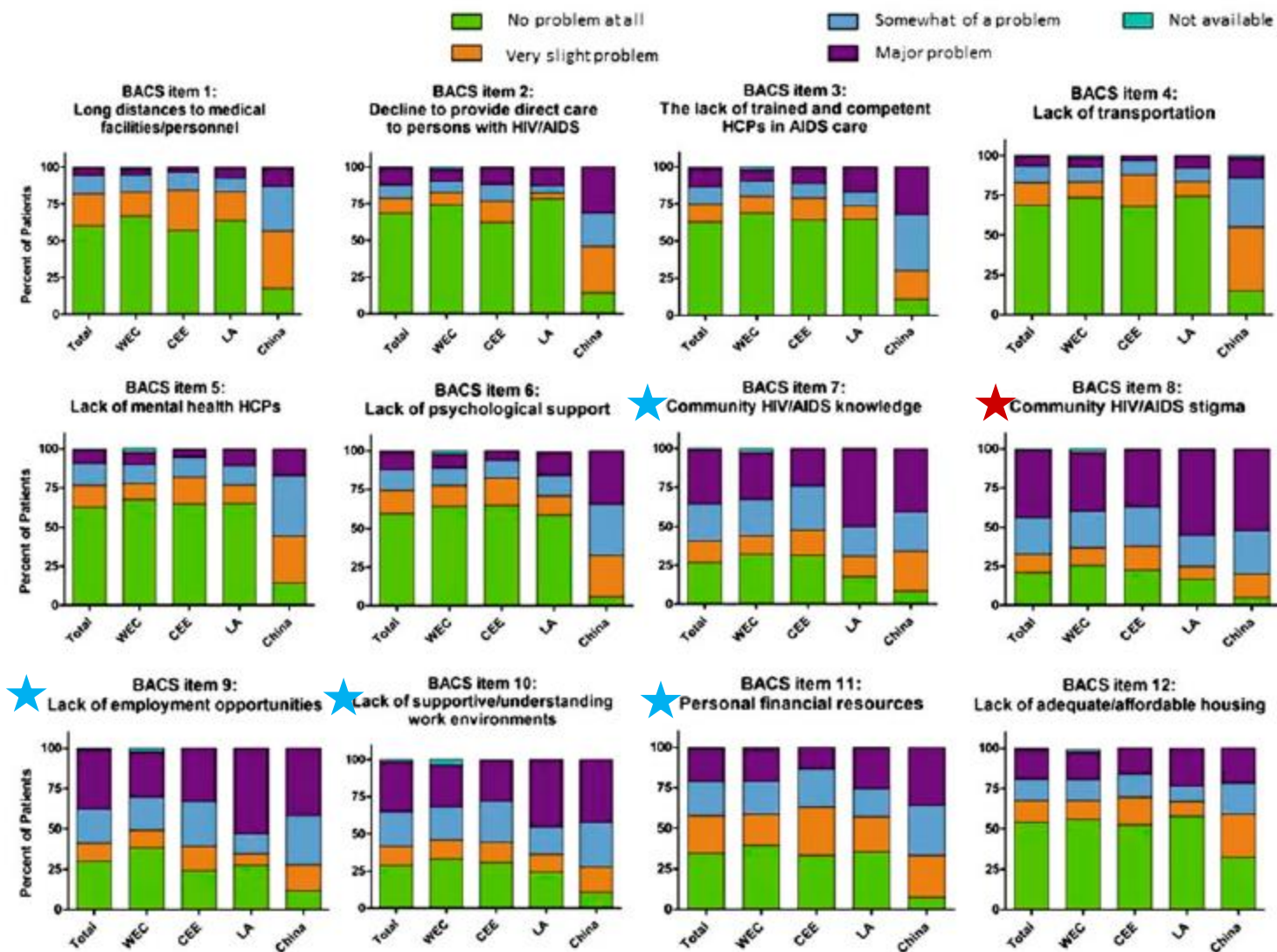


Figure 1. Prevalence of barriers to health care. Proportion of women responding that potential barriers included in the BACS questionnaire were no problem at all, a very slight problem, somewhat of a problem, or a major problem.

Antiretroviral Therapy and Reasons for Not Taking It among Men Having Sex with Men (MSM)—Results from the European MSM Internet Survey (EMIS)

Ulrich Marcus^{1*}, Ford Hickson², Peter Weatherburn², Martina Furegato^{3a}, Michele Breveglieri³, Rigmor C. Berg⁴, Axel J. Schmidt^{1ab}, for the EMIS network^{1†}

- European MSM Internet Survey (EMIS) data
 - community-recruited, anonymous, self-completed online survey conducted simultaneously in 25 languages across 38 countries in 2010
 - West—Belgium, France, Republic of Ireland, the Netherlands, and the United Kingdom.
 - Northwest—Denmark, Finland, Norway, and Sweden.
 - Central-West—Austria, Switzerland, Germany, and Luxembourg.
 - Southwest—Greece, Spain, Italy, and Portugal.
 - Central-East—The Czech Republic, Hungary, Poland, Slovenia, and Slovakia.
 - Southeast (EU)—Bulgaria, Cyprus, Malta, and Romania.
 - Southeast (non-EU)—Bosnia and Herzegovina, Croatia, Macedonia, Serbia, and Turkey.
 - Northeast—Estonia, Lithuania, and Latvia.
 - East—Belarus, Moldova, Russia, and Ukraine.

- Araştırmaya yanıt veren 13,353/174,209 (7.7%) kişi HIV ile enfekte olduğunu belirtmiş.
 - 9,484 (71.0%) hâlihazırda ART kullanıyor,
 - 278 (2.1%) kullanmış, fakat bırakmış,
 - 3,391 (25.4%) hiç ART kullanmamış
 - 200 (1.5%) tedavi durumu belirtilmemiş

Table 2. ART treatment status and reasons for not taking ART among MSM living in Europe with diagnosed HIV.

	2 Has stopped taking ART	3 Has never started ART	Total
Total	272 (100.0%)	3355 (100.0%)	3627 (100.0%)
Treatment not yet recommended	173 (63.6%)	2,941 (87.7%)	3,114 (85.9%)
I feel it is not necessary	32 (11.8%)	293 (8.7%)	325 (9.0%)
To avoid side effects	78 (28.7%)	221 (6.6%)	299 (8.2%)
I don't want to be reminded about HIV every day	41 (15.1%)	171 (5.1%)	212 (5.8%)
I'm afraid people will notice	14 (5.1%)	84 (2.5%)	98 (2.7%)
Treatment not affordable	9 (3.3%)	71 (2.1%)	80 (2.2%)
Treatment not available	2 (0.7%)	14 (0.4%)	16 (0.4%)
No hope	6 (2.2%)	4 (0.1%)	10 (0.3%)
Unknown ('other', but no explanation)	4 (1.5%)	40 (1.2%)	44 (1.2%)
PEP	5 (1.8%)	0 (0.0%)	5 (0.1%)
Diagnosis too recent / lab results pending	0 (0.0%)	78 (2.3%)	78 (2.2%)
Does not know what antiretroviral treatment is	0 (0.0%)	27 (0.8%)	27 (0.7%)
Distrust in medical science / Duesberg etc.	2 (0.7%)	17 (0.5%)	19 (0.5%)

doi:10.1371/journal.pone.0121047.t002

Table 2. ART treatment status and reasons for not taking ART among MSM living in Europe with diagnosed HIV.

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Total	272 (100.0%)	3355 (100.0%)	3627 (100.0%)
Treatment not yet recommended	173 (63.6%)	2,941 (87.7%)	3,114 (85.9%)
I feel it is not necessary	32 (11.8%)	293 (8.7%)	325 (9.0%)
To avoid side effects	78 (28.7%)	221 (6.6%)	299 (8.2%)
I don't want to be reminded about HIV every day	41 (15.1%)	171 (5.1%)	212 (5.8%)
I'm afraid people will notice	14 (5.1%)	84 (2.5%)	98 (2.7%)
Treatment not affordable	9 (3.3%)	71 (2.1%)	80 (2.2%)
Treatment not available	2 (0.7%)	14 (0.4%)	16 (0.4%)
No hope	6 (2.2%)	4 (0.1%)	10 (0.3%)
Unknown ('other', but no explanation)	4 (1.5%)	40 (1.2%)	44 (1.2%)
PEP	5 (1.8%)	0 (0.0%)	5 (0.1%)
Diagnosis too recent / lab results pending	0 (0.0%)	78 (2.3%)	78 (2.2%)
Does not know what antiretroviral treatment is	0 (0.0%)	27 (0.8%)	27 (0.7%)
Distrust in medical science / Duesberg etc.	2 (0.7%)	17 (0.5%)	19 (0.5%)

doi:10.1371/journal.pone.0121047.t002

Table 5. Regional distribution of HIV-related health care experiences and reasons for not taking ART.

		Region of residence						Total
		EMIS West	EMIS Northwest	EMIS Central-West	EMIS Southwest	WHO Central Europe	WHO Eastern Europe	
		N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
	Full N	4,006	433	5,023	2,863	448	451	13,224
Being out	Out to most people I know	3,439 (86.1%)	366 (85.3%)	4,230 (84.7%)	1,974 (69.5%)	249 (56%)	216 (48.2%)	10,474 (79.7%)
Satisfaction with confidentiality when testing for HIV	Dissatisfied	404 (10.8%)	49 (12.3%)	516 (10.9%)	426 (15.6%)	90 (22.2%)	101 (24.8%)	1,586 (12.8%)
Satisfaction with respect when testing for HIV	Dissatisfied	536 (13.9%)	66 (15.9%)	510 (10.7%)	494 (17.8%)	97 (22.7%)	85 (20.3%)	1,788 (14.1%)
Satisfaction with counselling when testing for HIV	Dissatisfied or no counselling	1,679 (44.4%)	104 (25.4%)	1,176 (24.6%)	947 (34.1%)	139 (32.6%)	163 (38.7%)	4,208 (33.4%)
Denied medical help	Sometimes or often medical help denied because of HIV	304 (7.7%)	27 (6.3%)	460 (9.3%)	181 (6.5%)	84 (19.03%)	82 (18.7%)	1,138 (8.8%)
Reasons for not taking ART	N	955	89	1197	842	172	243	3498
	Treatment not yet recommended	858 (89.8%)	81 (91.0%)	1,055 (88.1%)	785 (93.2%)	149 (86.6%)	178 (73.3%)	3,106 (88.8%)
	I feel it is not necessary	85 (8.9%)	2 (2.2%)	114 (9.5%)	36 (4.3%)	17 (9.9%)	60 (24.7%)	314 (9.0%)
	To avoid side effects	75 (7.9%)	5 (5.6%)	119 (9.9%)	42 (5.0%)	16 (9.3%)	35 (14.4%)	292 (8.3%)
	I don't want to be reminded about HIV every day	55 (5.8%)	6 (6.7%)	77 (6.4%)	28 (3.3%)	11 (6.4%)	34 (14.0%)	211 (6.0%)
	I'm afraid people will notice	23 (2.4%)	1 (1.1%)	31 (2.6%)	19 (2.3%)	8 (4.7%)	16 (6.6%)	98 (2.8%)
	Treatment not affordable	12 (1.3%)	1 (1.1%)	36 (3.0%)	7 (0.8%)	8 (4.7%)	13 (5.3%)	77 (2.2%)
	Treatment not available	5 (0.5%)	0 (0.0%)	1 (0.1%)	1 (0.1%)	1 (0.6%)	7 (2.9%)	15 (0.4%)

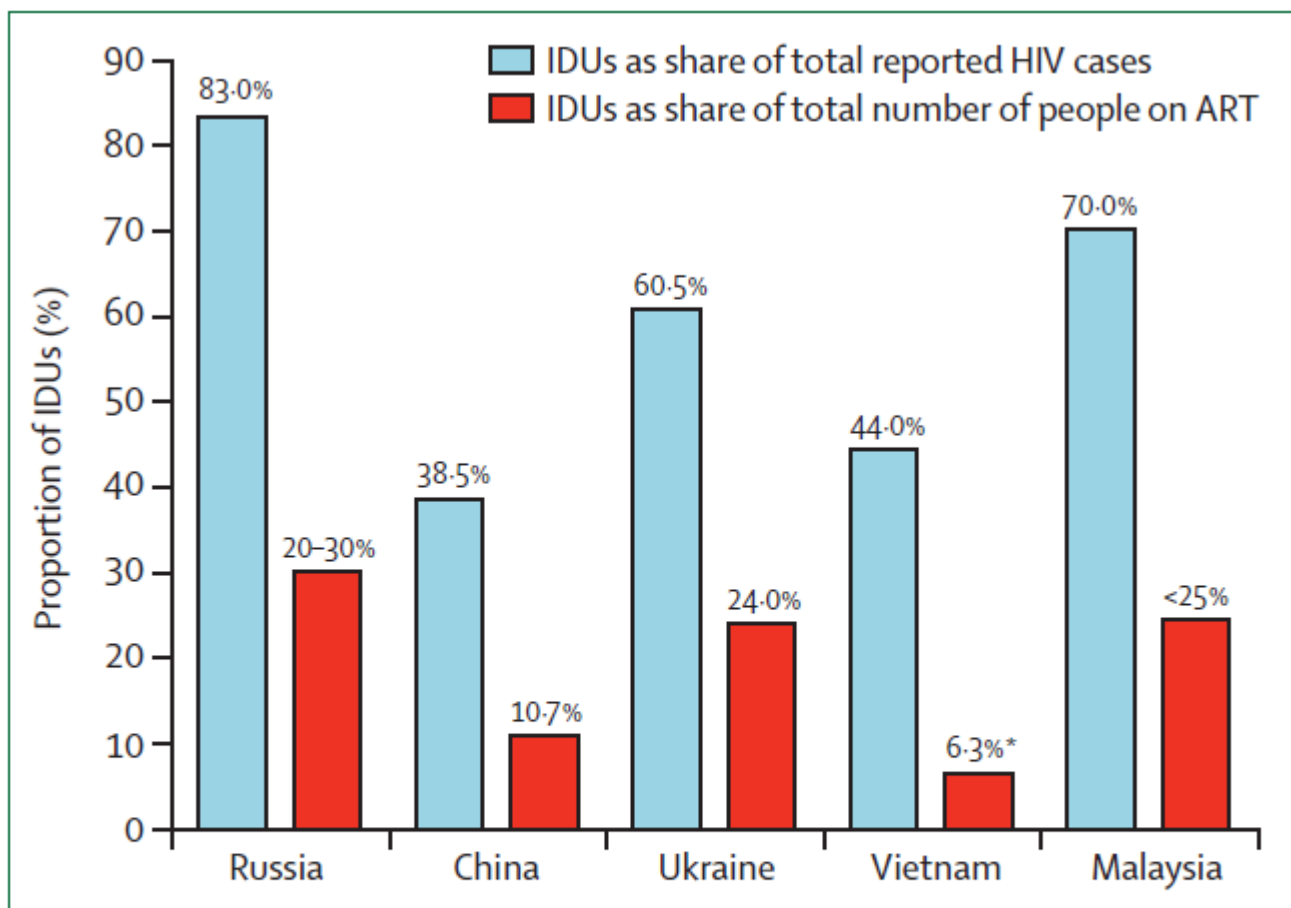


Figure 1: IDUs as share of total HIV cases and of patients receiving ART, 2008

Data sources: number of IDUs infected with HIV,⁶⁰ total HIV cases;⁶⁸ IDUs on ART in Russia,⁶⁹ China,¹⁴ Ukraine,⁷⁰ Vietnam,^{12,68} and Malaysia.⁶⁵ IDU=injecting drug user. ART=antiretroviral therapy. *Data are for 2009.

“We fear the police, and the police fear us”: Structural and individual barriers and facilitators to HIV medication adherence among injection drug users in Kiev, Ukraine

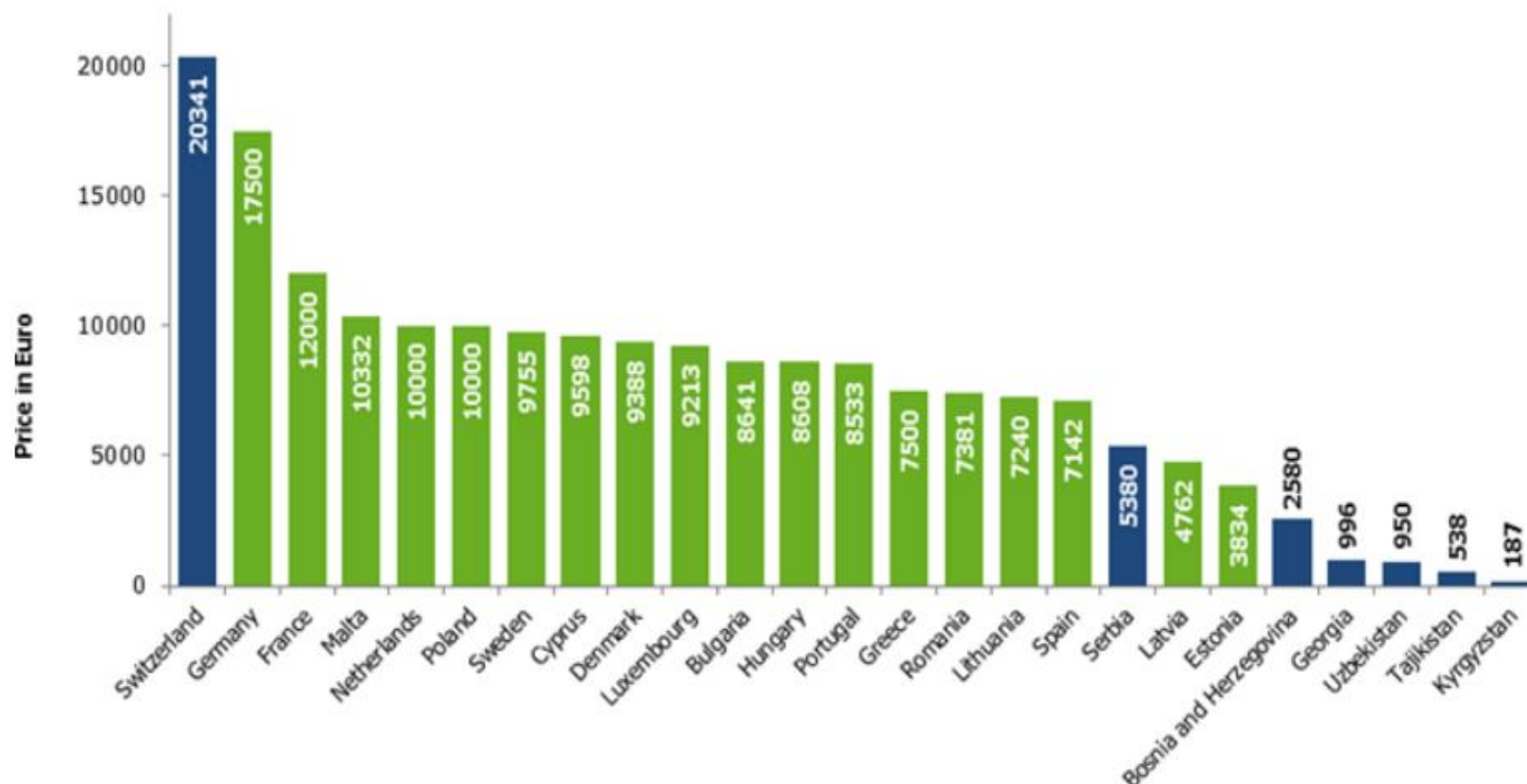
Matthew J. Mimiaga, ScD, MPH^{1,2}, Steven A. Safren, PhD^{1,2}, Sergiy Dvoryak, MD, PhD³, Sari L. Reisner, MA^{2,4}, Richard Needle, PhD, MPH⁵, and George Woody, MD⁶

Main barriers and facilitators related to HIV medication adherence

Main problems or barriers to taking HIV medications as prescribed		Successful strategies and other facilitators for HIV medication adherence	
1	Harassment and discrimination by police	1	Cues for pill-taking
2	Opioid dependence	2	Support and reminders from family, significant other, and friends
3	Complexity of drug regimen and treatment options	3	Opioid substitution therapy
4	Medication side effects;	4	Wanting improved health
5	Forgetting		
6	Co-occurring mental health problems		
7	HIV associated stigma		

Göçmenlerin ART'ye erişememe nedenleri

- Sağlık sigortasının olmaması
 - Çek Cumhuriyeti, Finlandiya, Macaristan, İsrail, Karadağ, Polonya ve Slovakya
- Sosyal güvenliğin kalıcı oturma iznine/sabit adrese bağlı olması
 - Danimarka, Lüksemburg
- ART'nin vatandaş olanlar için erişilebilir olması
 - Gürcistan, Romanya, Ukrayna
- ART alabilmek için HIV hizmet sistemine kayıt olma gereksinimi
 - Bulgaristan ve Letonya
- Erişilmesi güç/marjinalize olmuş grup
- Göçmenlerin, göçmenlik durumlarını açıklamaktan korkmaları
- Aksi yöndeki kurallara rağmen, ART bazı ülkeler tarafından resmi olmayan kanallardan temin ediliyor
 - İngiltere, İsveç

Figure 12. Reported average cost of ART per patient and year (2013)

<http://ecdc.europa.eu/en/publications/Publications/dublin-rome-10-years-hiv-europe-central-asia.pdf>

Orta Avrupa'da HIV Bakım Hizmetleri Çalışması

15 Orta Avrupa ülkesi
Nüfus 620 000-76 600 000



Küresel Fon desteđi

Alt gelir düzeyi (1)	Üst-orta gelir düzeyi (8)	Yüksek gelir düzeyi (6)
Kosova (KF)	Arnavutluk (KF)	Hırvatistan
	Bulgaristan (KF)	Çek Cumhuriyeti
	Bosna (KF)	Macaristan (KF)
	Makedonya (KF)	Polonya
	Karadağ (KF)	Slovakya
	Romanya	Slovenya
	Sırbistan (KF)	
	Türkiye	

Rising Population Cost for Treating People Living with HIV in the UK, 1997-2013

Sundhiya Mandalia^{1,2,3}, Roshni Mandalia¹, Gary Lo^{1,3}, Tim Chadborn⁴, Peter Sharott⁵, Mike Youle^{1,6}, Jane Anderson⁷, Guy Baily⁸, Ray Brettle⁹, Martin Fisher¹⁰, Mark Gompels¹¹, George Kinghorn¹², Margaret Johnson⁶, Brendan McCarron¹³, Anton Pozniak³, Alan Tang¹⁴, John Walsh¹⁵, David White¹⁶, Ian Williams¹⁷, Brian Gazzard^{1,2,3}, Eduard J. Beck^{1,3,18*}, for the NPMS-HHC Steering Group

- Tedavi ve bakım için NHS hizmetlerini kullanan HIV pozitif bireylerin toplam sayısı
 - 1997’de 16.075 hasta
 - 2006’da 52.083 hasta
- Maliyet
 - 1997’de £104 (164)* milyon
 - 2006’da £483 (683)* milyon

* Toplum hizmetleri maliyeti dâhil

2006'daki bazal değere göre 1,5 kat artış

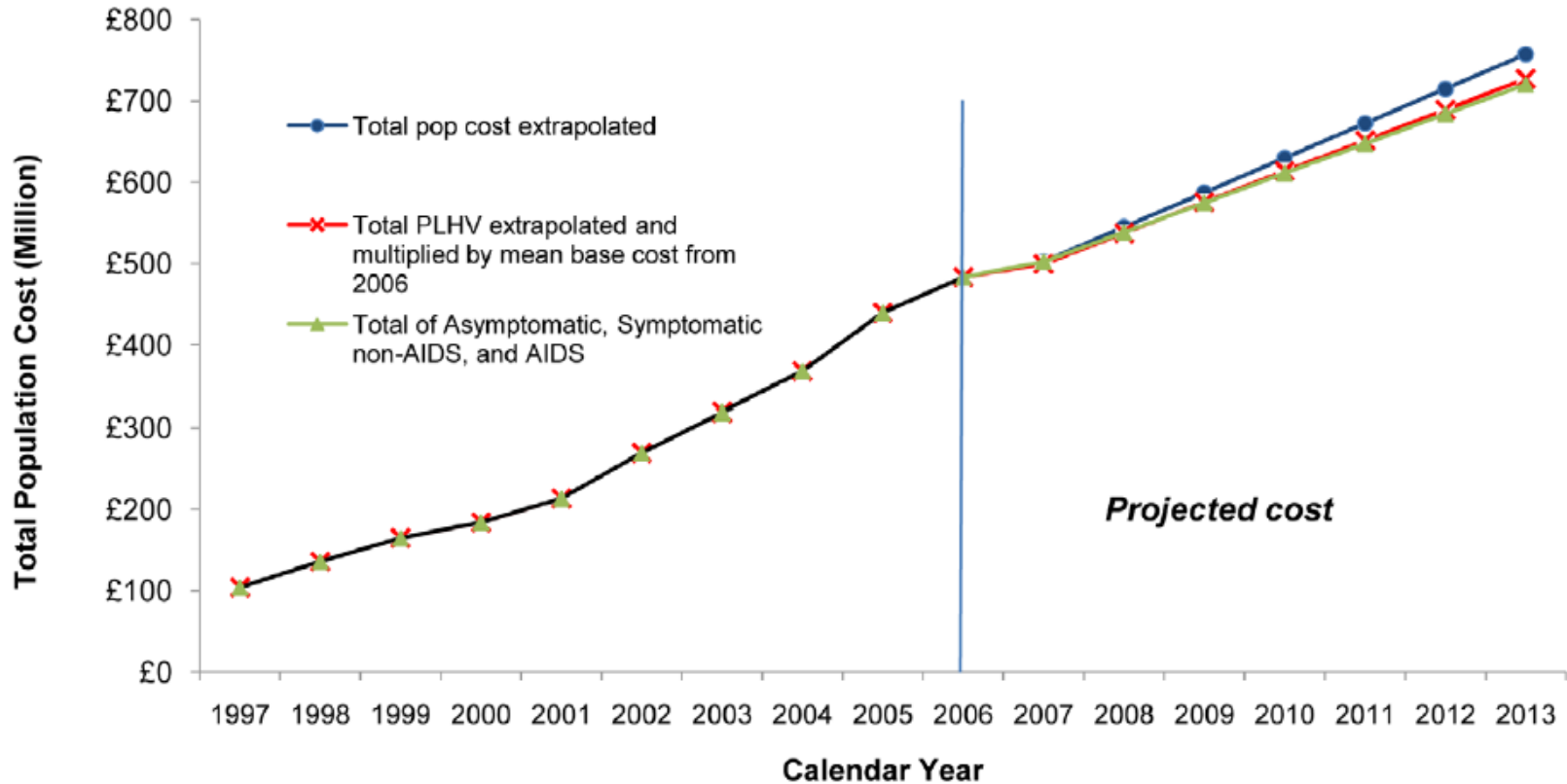


Figure 4. Annual Average UK Direct Population Cost 1997–2006 and Projections 2007–2013 based on three Scenarios (UK 2006 prices).

doi:10.1371/journal.pone.0015677.g004

Türkiye’de kullanımda olan antiretroviral ilaçlar

	EMA	Türkiye	Gecikme
ZDV	1987	1995	8 yıl
3TC	1996	1996	-
ZDV + 3TC	1998	2000	2 yıl
ABC	1999	2002	3 yıl
ABC + 3TC	2004		Yok
TDF	2002		
FTC			
TDF + FTC	2005		
MVC	2007		Yok
DTG	2013	2015	2 yıl
ABC + 3TC + DTG	2014		Yok
LPV /r	2001	2001	-
DRV	2007	2011	4 yıl
EFV	1999		
ETV	2008	2011	11 yıl
RPV	2011	2013	2 yıl

Orta Avrupa'da kullanımda olan ilaçlar

NRTI	%	NNRTI	%	PI	%	FDC	%
ZDV	93.7	NVP	100	LPV/r	100	ZDV + 3TC	100
3TC	93.7	EFV	93.7	DRV	75.0	TDF + FTC	68.7
TDF	93.7	ETR	37.5	ATV	56.2	ABC + ZDV + 3TC	37.5
ABC	87.5	RPV	31.2	FPV	43.7	EFV + TDF + FTC	18.7
FTC	62.5	DLV	6.2	TPV	6.2	EVG + TDF + FTC + COBI	18.7
ddI	62.5	FI		INSTI		RPV + FTC + TDF	12.5
d4T	50.0	Fuzeon	37.5	RAL	81.2		
ddC	6.2			DTG	25.0		
				EVG	12.5		

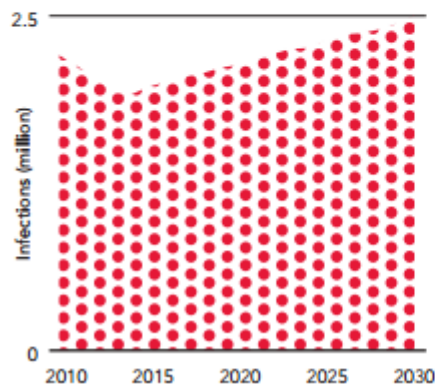
* 2014 EACS Kılavuzu'na göre ilk seçenek ilaçlar kırmızı ile gösterilmiştir

Stokların tükenmesi

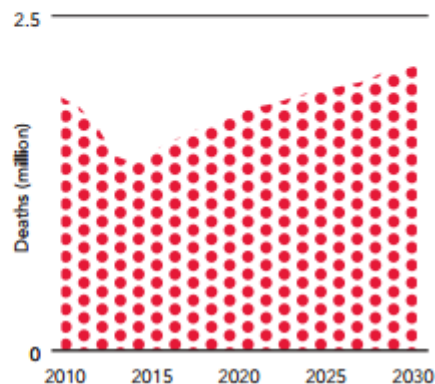
- Orta Avrupa ülkelerinin %50'sinde halen söz konusu
- Çoğunlukla ilaçların satın alınması sırasında yaşanan sorunlara bağlı

NO SCALE-UP—maintain 2013 coverage levels

New HIV infections in low- and middle-income countries (millions)

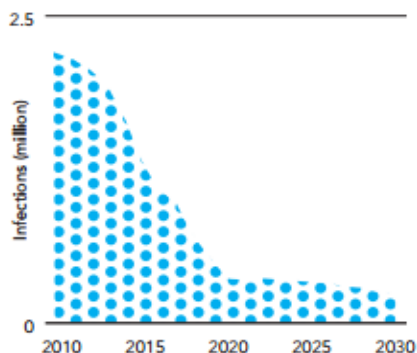


AIDS-related deaths in low- and middle-income countries (millions)

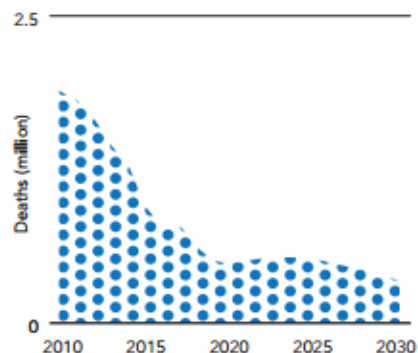


RAPID SCALE-UP—achieve ambitious targets

New HIV infections in low- and middle-income countries (millions)



AIDS-related deaths in low- and middle-income countries (millions)



MAJOR BENEFITS:



FAST-TRACK

ENDING THE AIDS EPIDEMIC BY 2030

**21
MILLION**

AIDS-related deaths
averted by 2030

**28
MILLION**

HIV infections
averted by 2030

**5.9
MILLION**

infections among
children averted by
2030

15— FOLD

return on HIV
investments

http://www.unaids.org/sites/default/files/media_asset/JC2686_WAD2014report_en.pdf

Başlıca zorluklar

- Ülkelerin önemli bir bölümünde tedaviye ihtiyacı olan her altı kişiden biri tedaviye erişemiyor.
- Bölgede tedaviye erişim artmış olmasına karşın, ECDC'ye veri gönderen ülkelerin üçte birinden fazlasında ART gereksinimi olan bireylerde ilaca erişim %85'in altında.
 - Her 10 ülkeden birinde, tedavinin kapsayıcılığı <%50 (bunların çoğu AB/AEA kapsamında olmayan ülkeler)

Başlıca zorluklar

- HIV yükünün büyük bölümünden sorumlu olan kilit toplumlar tedaviye en az erişebilenler.
- ART kullanmaya uygun olan hastaların sayısı artıyor.
- ART'nin maliyeti atıyor.
- Stoklarda tükenme nadir ama halen söz konusu.
- Alt ve alt-orta gelir düzeyindeki ülkelerin bağışçılara olan gereksinimi devam ediyor fakat sağlanan fonlar giderek azalıyor.

Gelecek

- Herkes, doğru zamanda, etkili ve sürdürülebilir tedaviye ulaşma hakkına sahip olmalı.
- Maliyet etkin ve etkili girişimlere gereksinim var.
- Ülkelerin kendi kaynaklarını kullanmalarını ve doğru yönlendirmelerini sağlayacak yollar bulunmalı.
- Politik açıdan daha fazla taahhüt gerekli.

Then Now Future

Fifteen years of progress and hope. But miles to go to end the AIDS epidemic by 2030—new milestones to reach, barriers to break and frontiers to cross.

People living with HIV on antiretroviral therapy

1 million
15 million
All people living with HIV

2001 2015 2030

New HIV infections

3 million
2 million
0.2 million

2001 2014 2030

AIDS-related deaths

2.0 million
1.2 million
0.2 million

2004 2014 2030

Investments for AIDS response

4.9 US\$ billion
21.7 US\$ billion
32 US\$ billion

2001 2015 2020

Teşekkür

- Aleksandra Marjanovic (Montenegro)
- Azzaden Shunnar (Slovakia)
- Andrzej Horban (Poland)
- Arjan Harxhi (Albania)
- Cristiana Oprea (Romania)
- Daniela Maric (Serbia)
- Denes Banhegyi (Hungary)
- Djordje Jevtovic (Serbia)
- Ivaylo Elenkov (Bulgaria)
- Kveta Dessieova (Czech Republic)
- Milena Stevanovic (Macedonia)
- Maria Nikolova (Bulgaria)
- Mario Poljak (Slovenia)
- Pavlina Bukovinova (Slovakia)
- Valbon Krasniqi (Kosovo)
- Vesna Hadjosmanovic (Bosnia & Herzegovina)

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