

Epidemiyolojide Deęişimler

Dr. Dilek Yıldız Sevgi

Enfeksiyon Hastalıkları ve Klinik Mikrobiyoloji
Şişli Hamidiye Etfal Eğitim ve Araştırma
Hastanesi

Sunum Planı

- Tarihçe
- Dünyada epidemiyoloji
- Epideminin sonlamasında hedefler
- Türkiye'de epidemiyoloji:
 - Halk Sağlığı Genel Müdürlüğü verileri
 - Bizden yayınlar

Tarihçe

- 1981: Avrupa ve Amerika'da eş zamanlı sendromun tanımlanması
- 1983-85: HIV-1 tanımlanması, ELISA testlerin gelişimi, hastalığın Afrika'da tanımlanması
- 1985-1995: Dünyaya yayılan hastalığın öğrenilmesi
- 1995-2005: Davranış değişikliği ve aşıda başarısızlık
- 2005'den günümüze: Tedavideki gelişmeler ve başarılı önlemler

2016 yılı verilerine göre

HIV ile infekte kişi sayısı

36,7 milyon

30,8-42,9 milyon

2016 yılında

Yeni infekte olan kişi sayısı



1,8 milyon

HIV ilişkili ölüm



1 milyon

Dünyada



Toplam: **36.7 milyon** (30.8-42.9 milyon)

Yetişkin: 34.5 milyon (28.-40.2 milyon)

Kadın: 17.8 milyon (15.4-20.3 milyon)

Erkek: 16.7 milyon (14-19.5 milyon)

15 yaş altı çocuk: 2.1 milyon (1.7-2.6 milyon)

Epideminin başından itibaren

HIV ile infekte kişi: 76,1 milyon

HIV/AIDS ilişkili ölüm: 35 milyon

2016 yılında HIV ile infekte olan yeni kişi sayısı

- Toplam: 1.8 milyon (1.6 milyon – 2.1 milyon)
- Erişkin: 1.7 milyon (1.4 milyon – 1.9 milyon)
- 15 yaş altı çocuk: 160 000 (100 000 – 220 000)

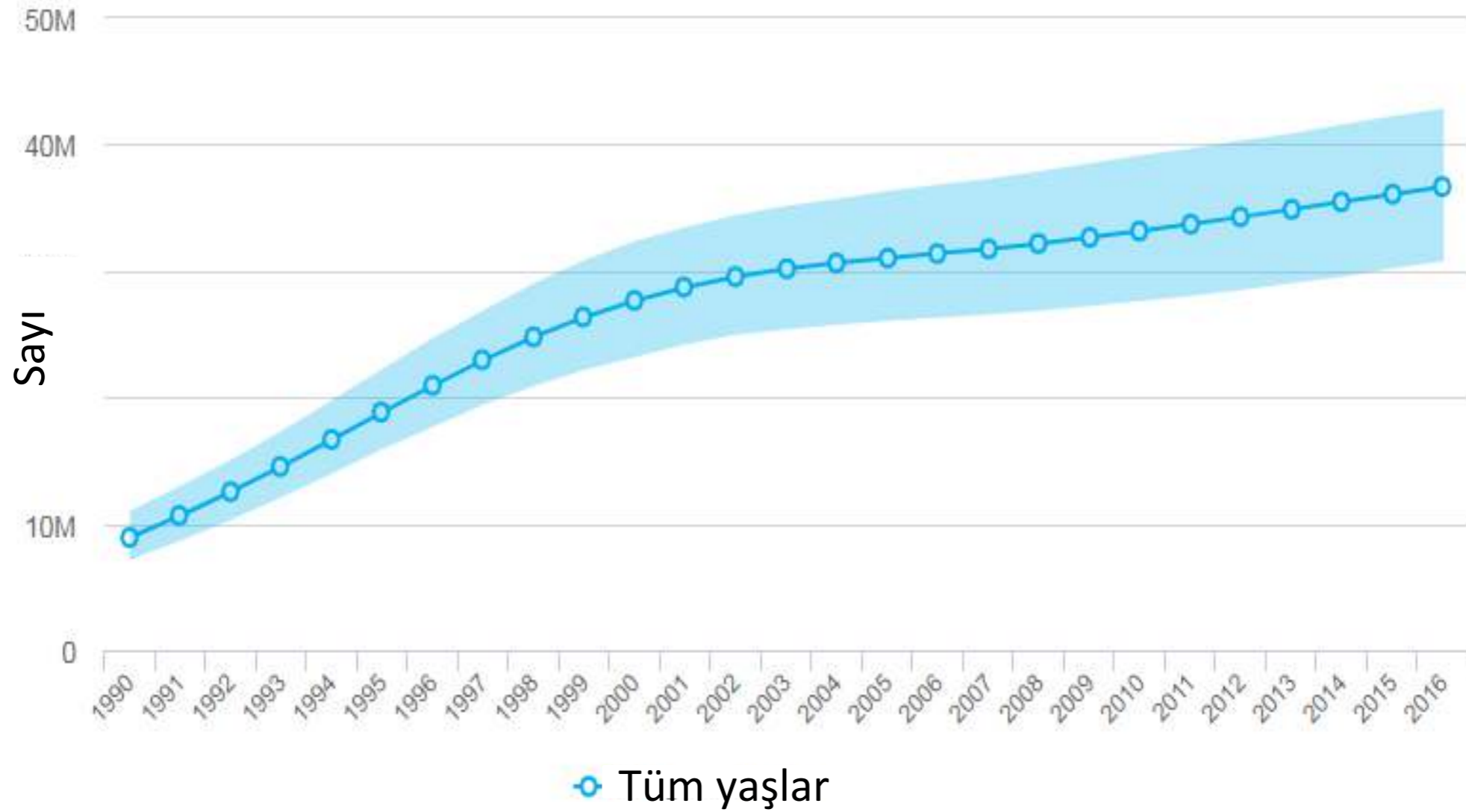
2016 yılında AIDS ilişkili ölüm

Toplam: 1.0 milyon (830 000 – 1.2 milyon)

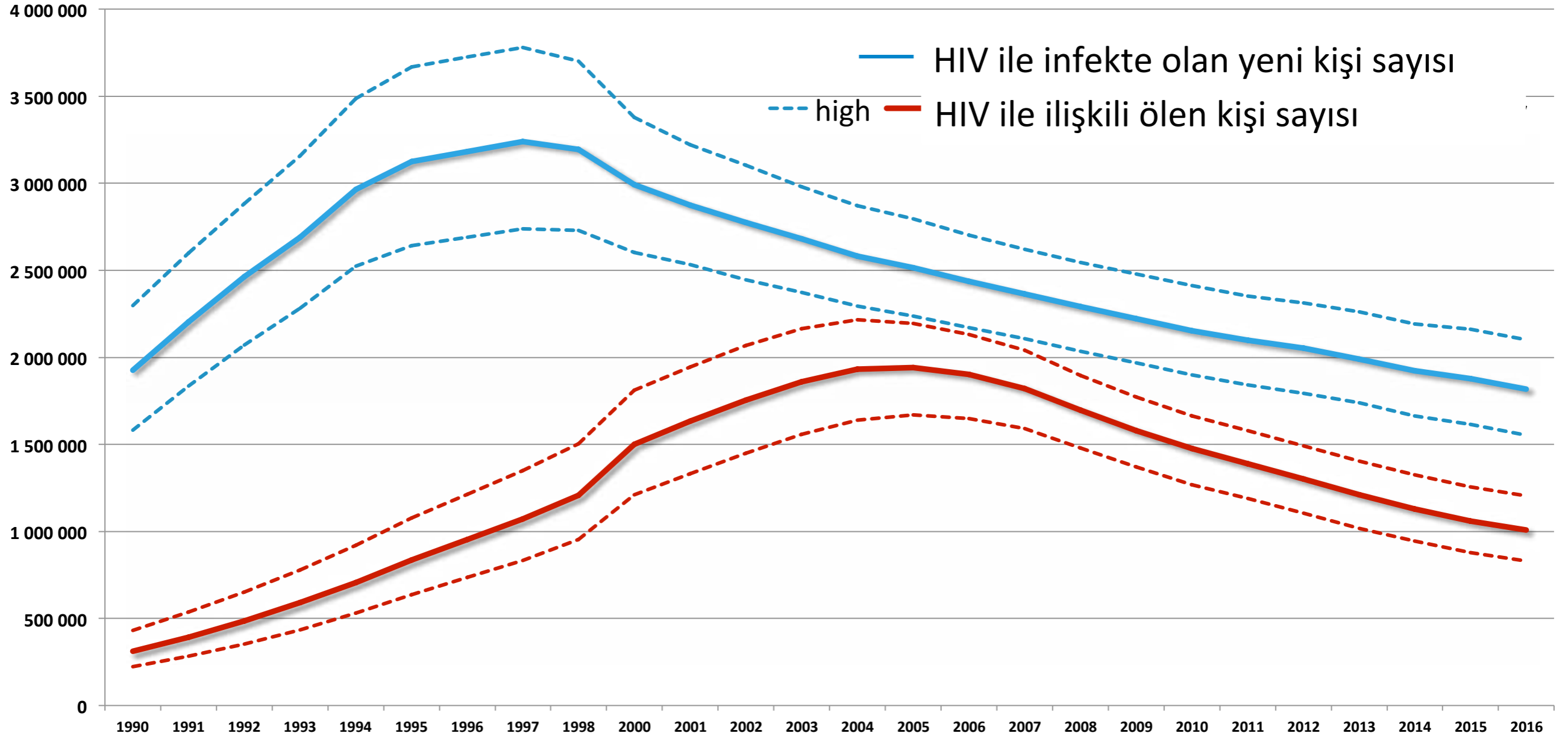
Erişkin: 890 000 (740 000 – 1.1 milyon)

15 yaş altı çocuk: 120 000 (79 000 – 160 000)

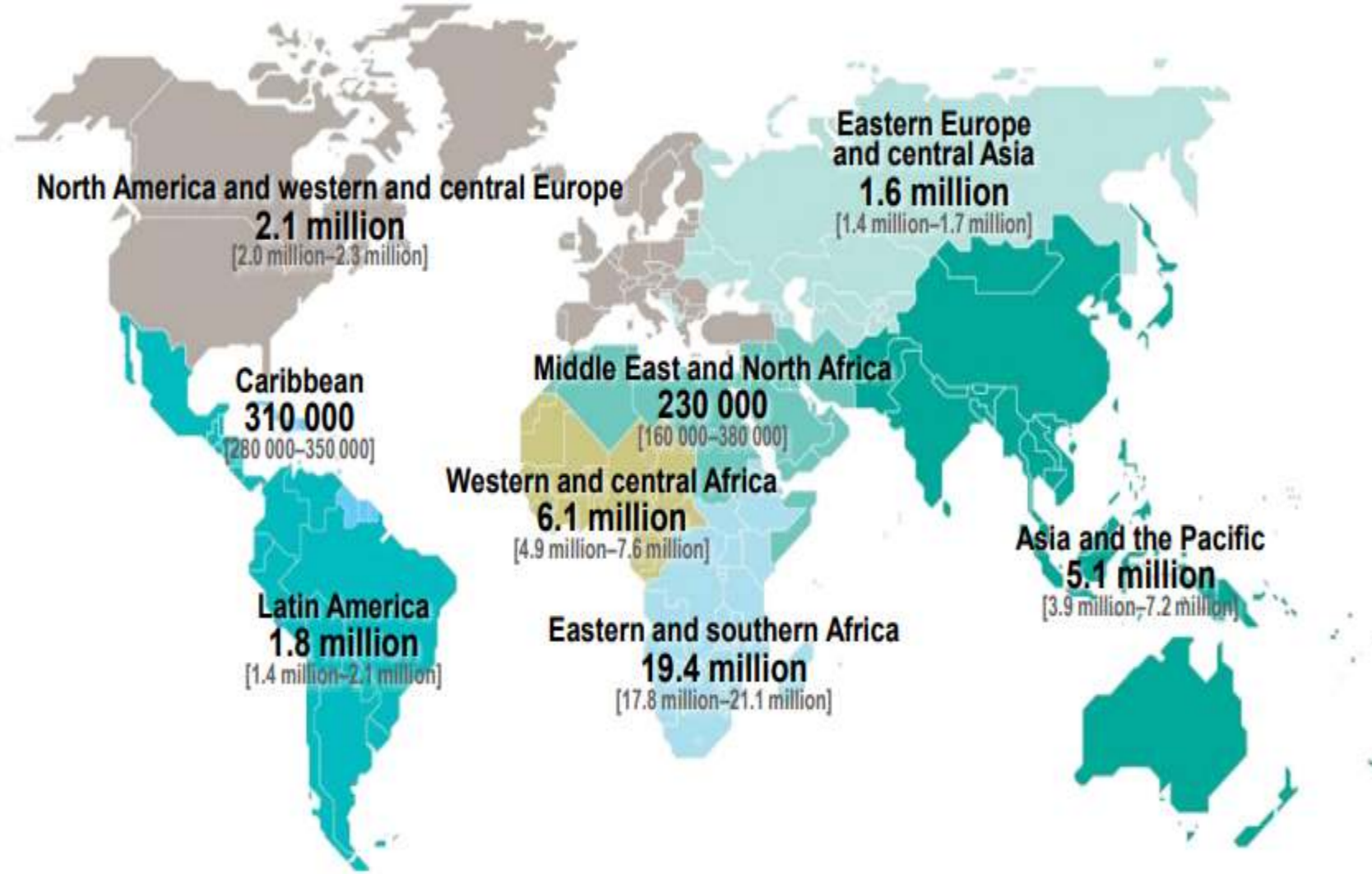
HIV ile infekte kişi sayısı



Yıllara göre HIV insidansı ve mortalite

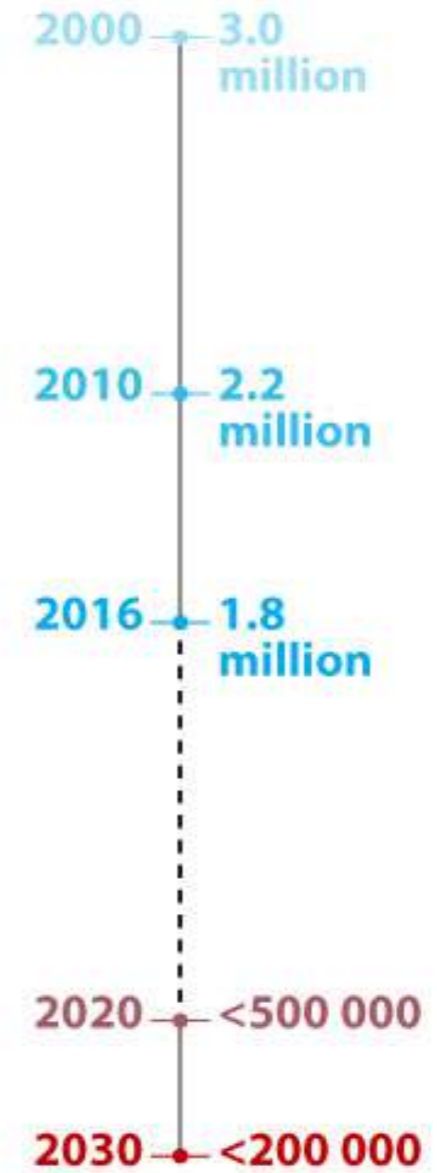
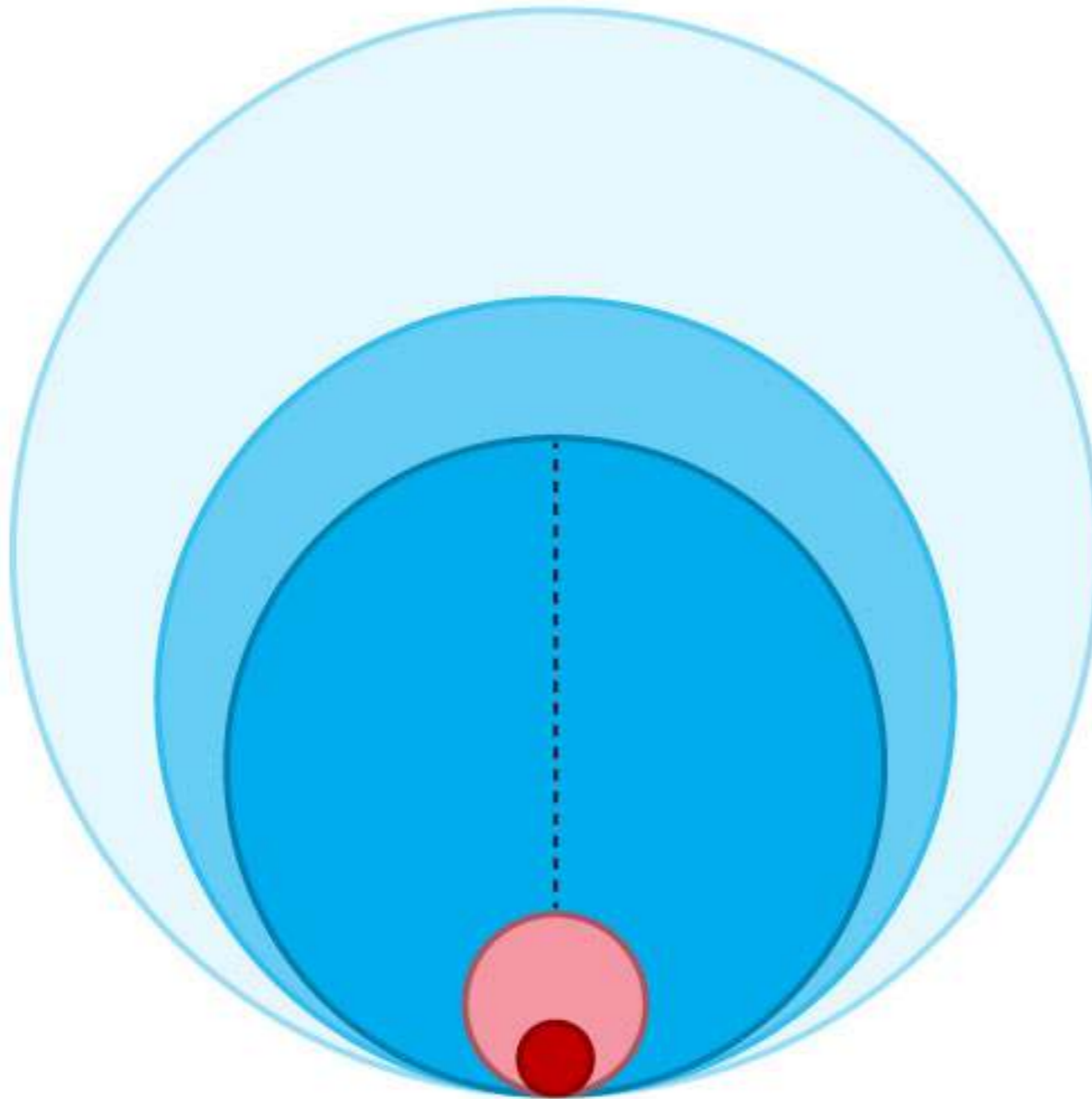


Bölgelere Göre Dağılım (2016)



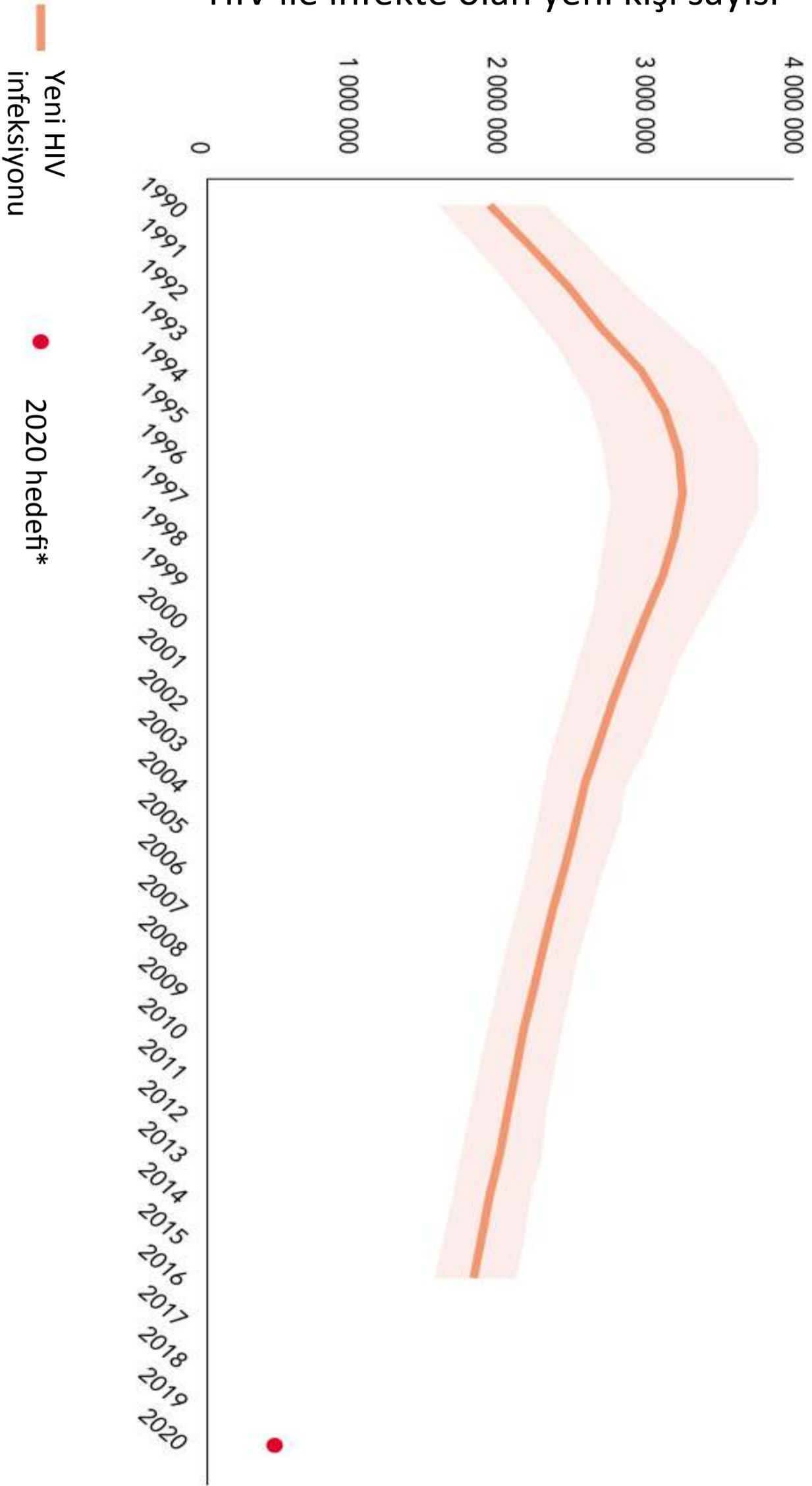
Total: 36.7 million [30.8 million–42.9 million]

HIV ile infekte olan yeni kişi sayısı

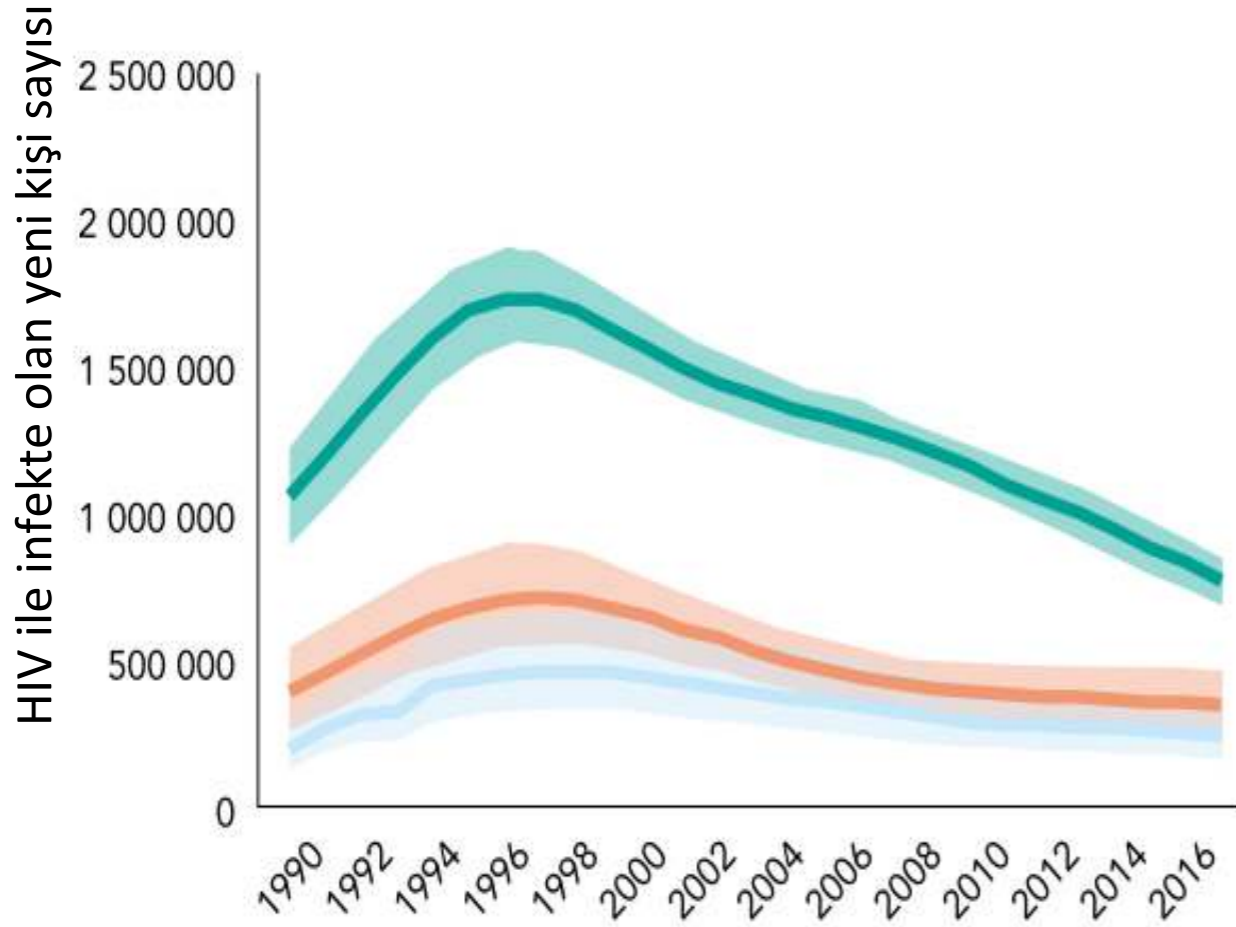


UNAIDS/WHO estimates

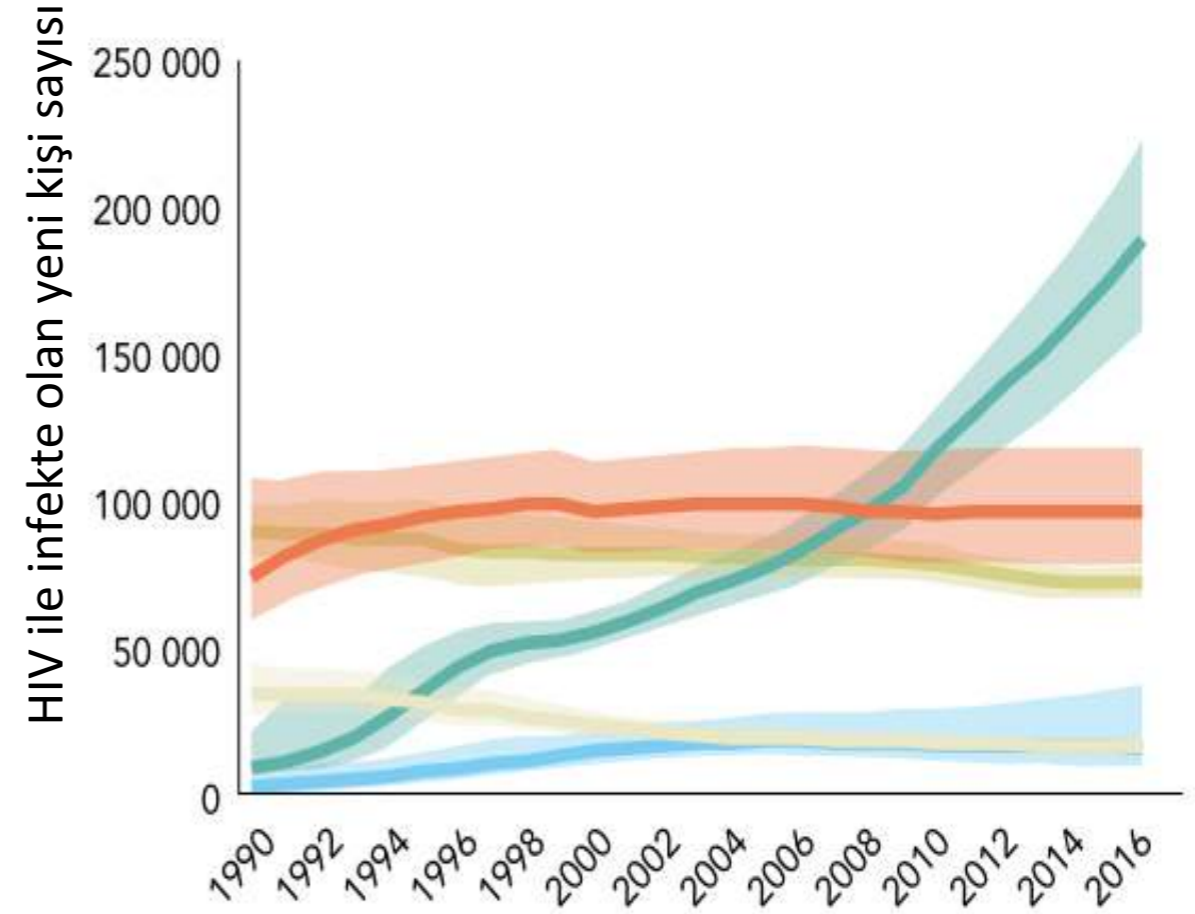
HIV ile infekte olan yeni kişi sayısı



Doğu Avrupa ve Orta Asya için alarm

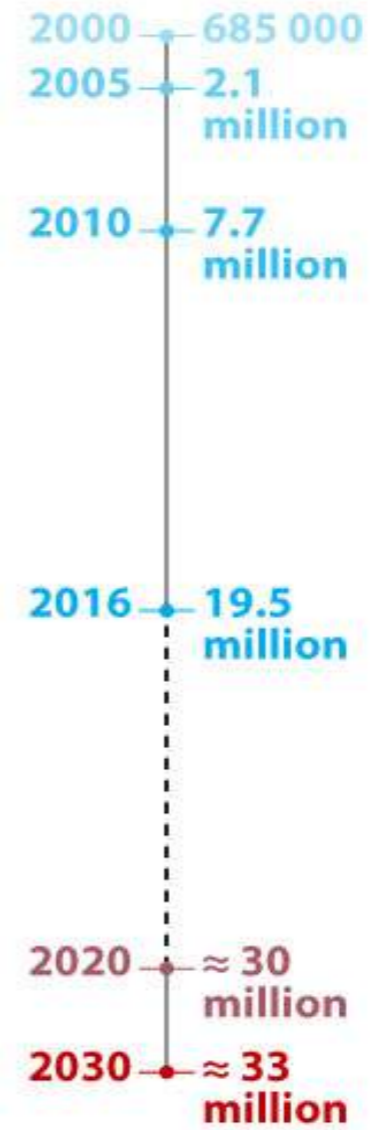
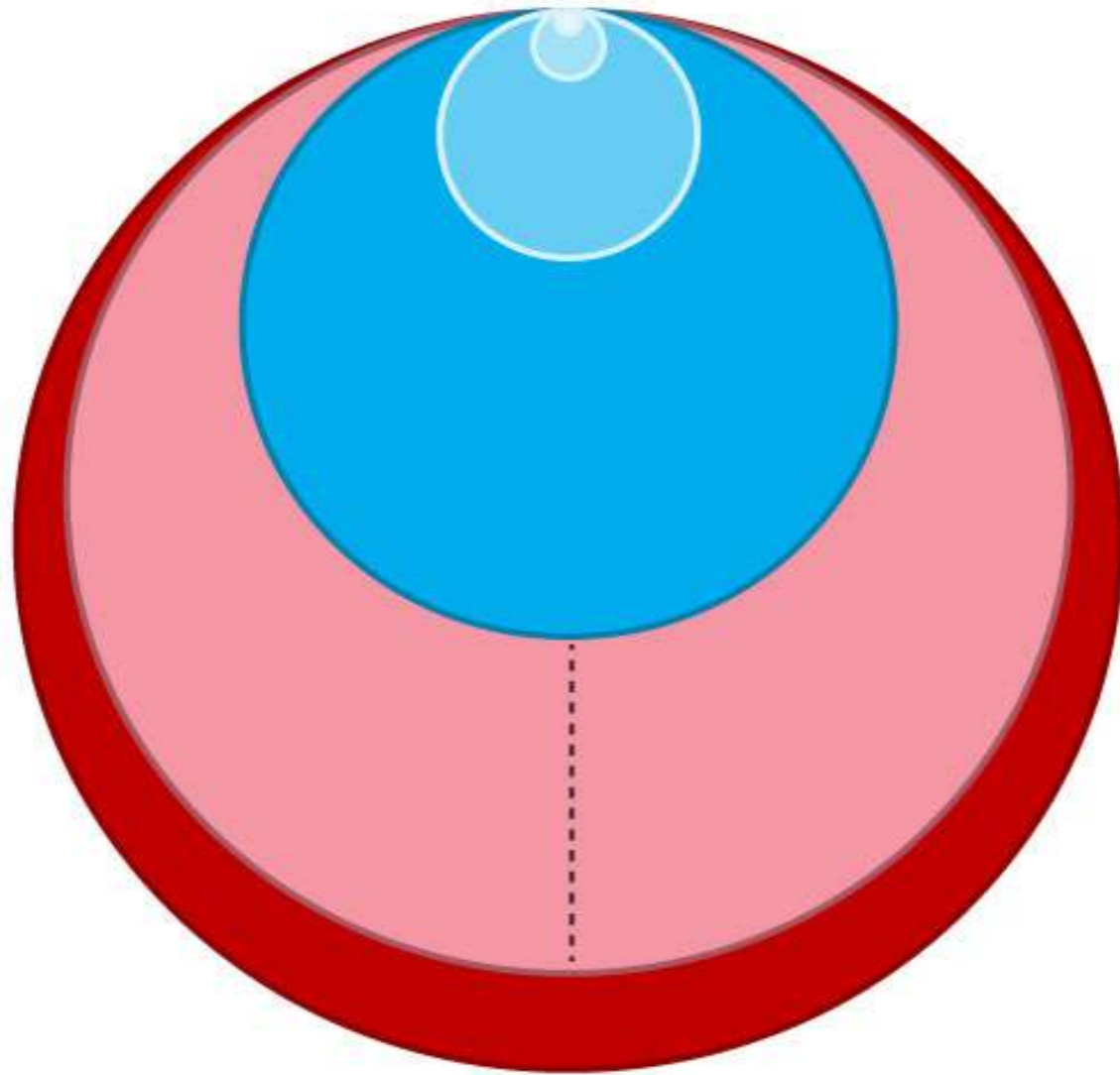


- Doğu ve Güney Afrika
- Batı ve Orta Afrika
- Asya ve Pasifik



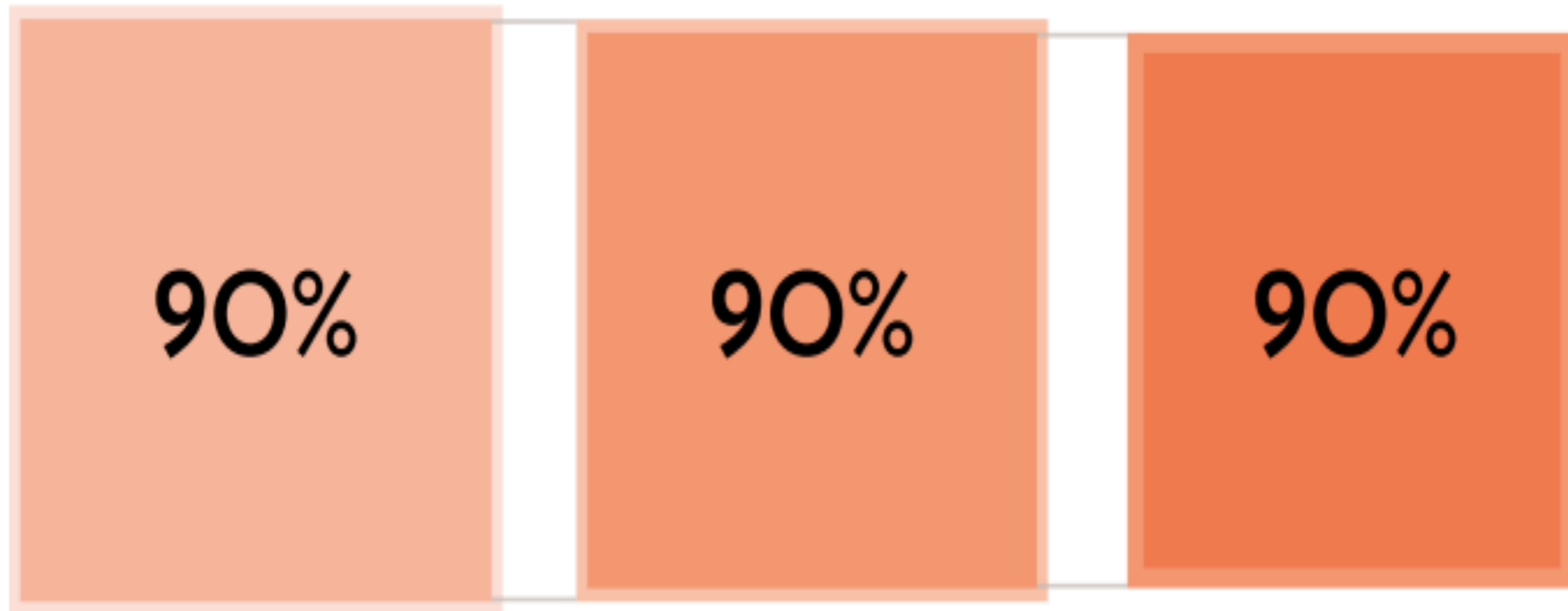
- Doğu Avrupa ve Orta Asya
- Batı ve Orta Avrupa
- Kuzey Amerika
- Karayip
- Latin Amerika
- Orta Doğu ve Kuzey Afrika

Antiretroviral Tedavi Alan Kişi Sayısı



UNAIDS/WHO estimates

90-90-90 Hedefi

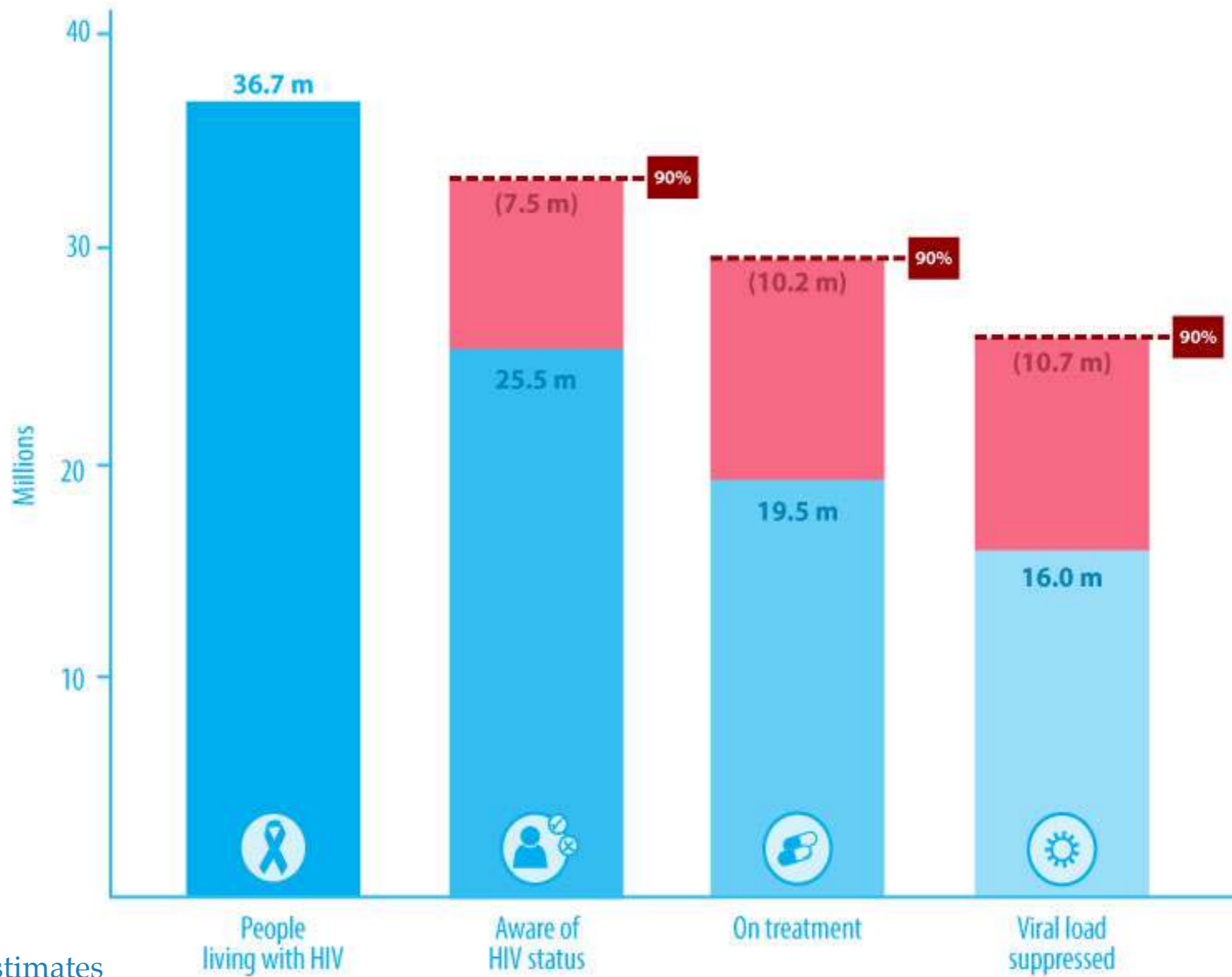


HIV statüsünün
farkında olma

Tedaviye erişim

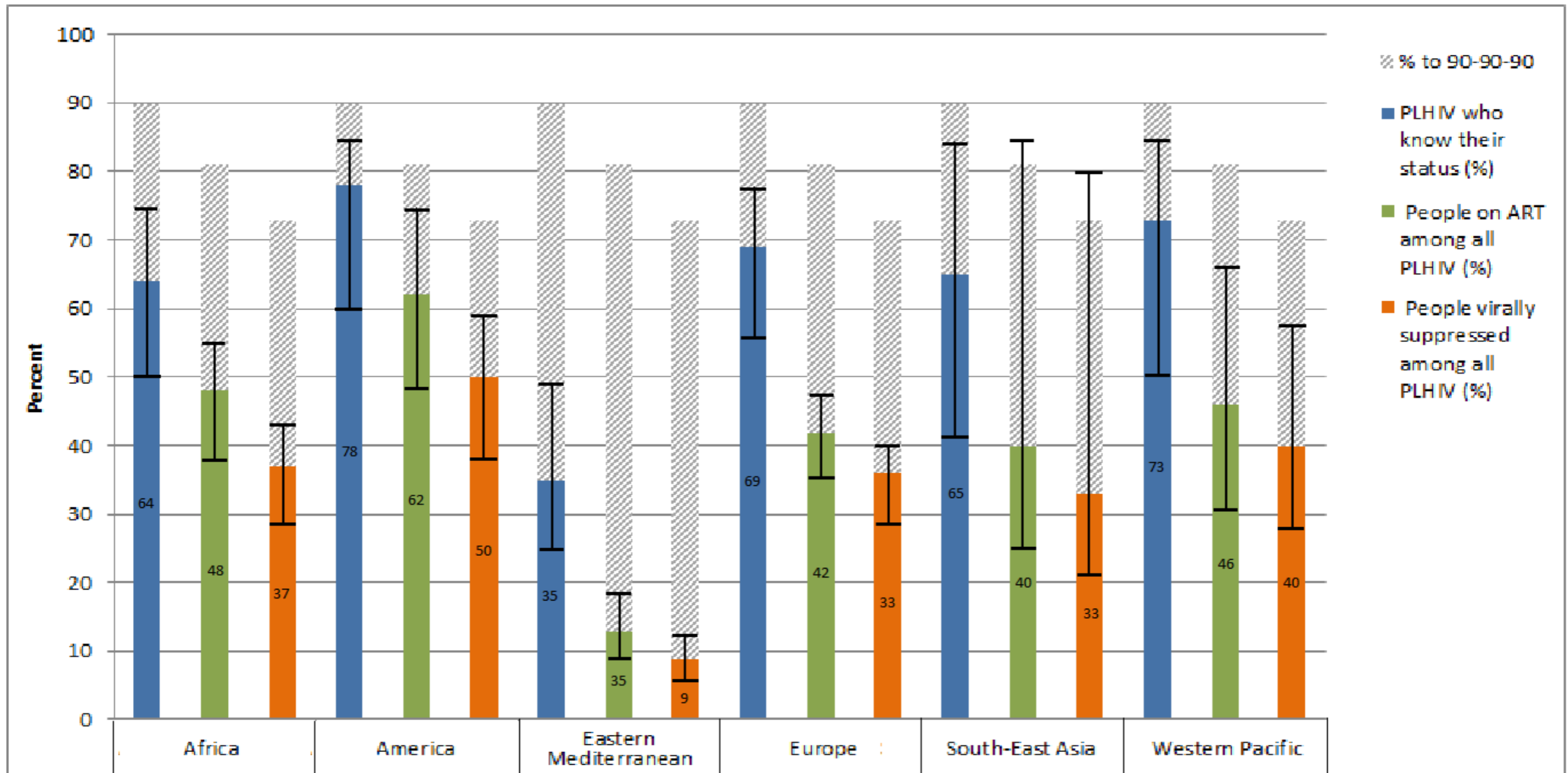
Viral supresyon

90-90-90 Hedefi (2016)



UNAIDS/WHO estimates

Bölgelere Göre 90-90-90 Hedefi (2016)



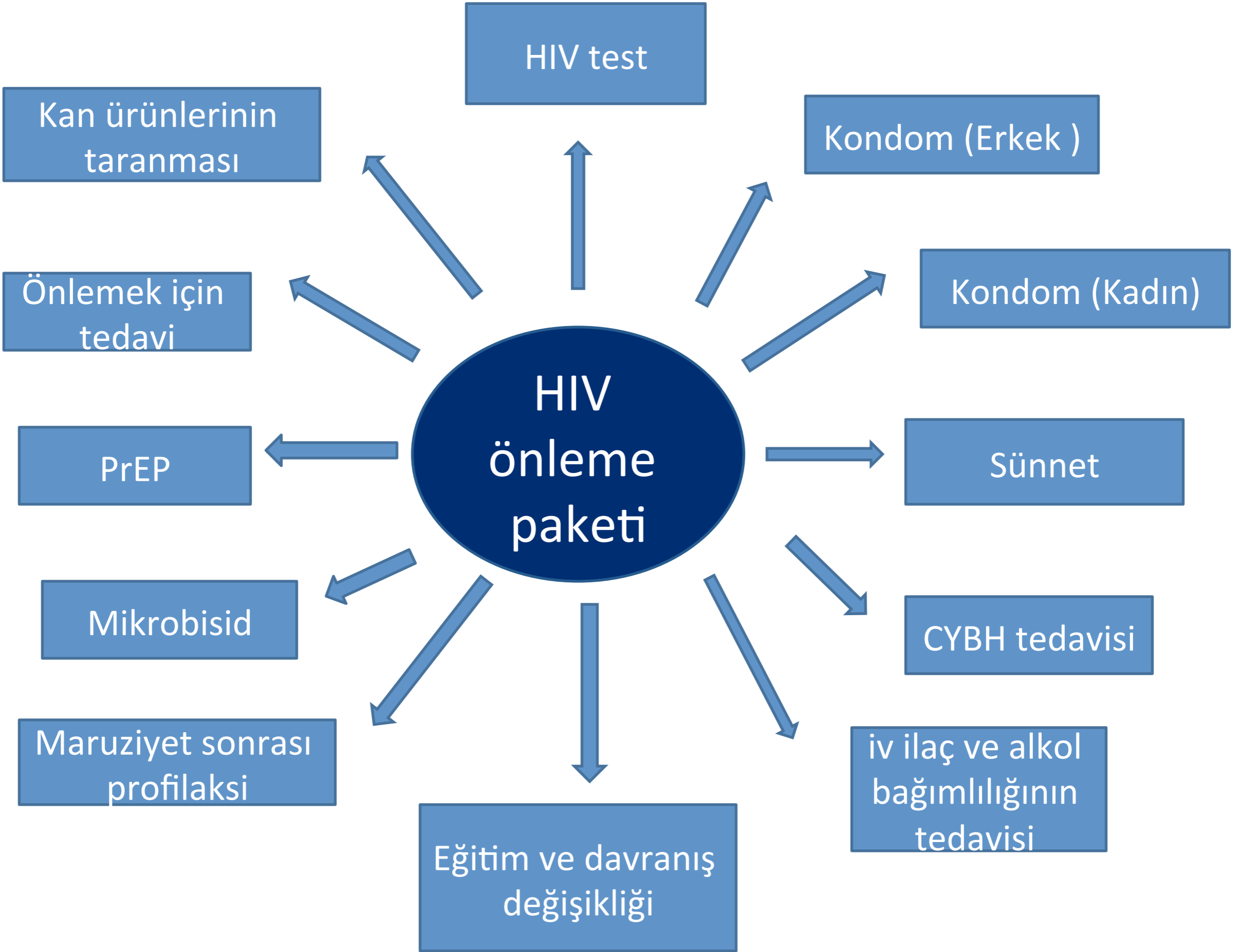
İyi Haberler

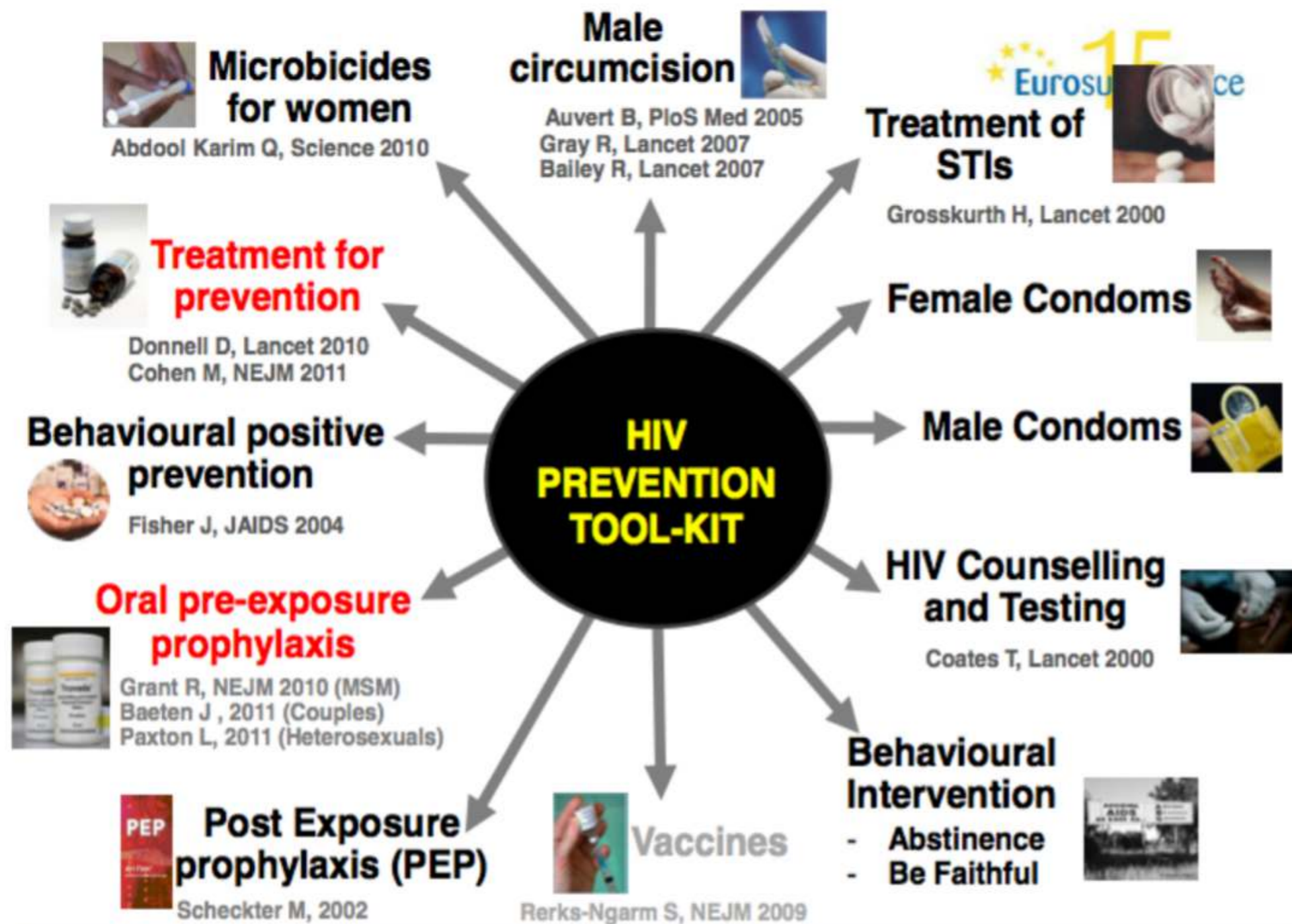
- Haziran 2016: HIV ile yaşayan 19,5 milyon kişi ART alıyor. 2010'da 7.7 milyon, Haziran 2015'de 15,8 milyon kişi
- 2016: HIV ile yaşayan hamile kadınların % 76'sı HIV'i önlemek için ART erişmiş durumda
- Çocuklar arasındaki yeni HIV enfeksiyonları 2010'dan bu yana % 50 azaldı
- Erişkinler arasında 2010 yılından bu yana yeni HIV enfeksiyonunda azalma beklendiği kadar değil

HIV bakımı ve tedavisindeki son deęişiklikler

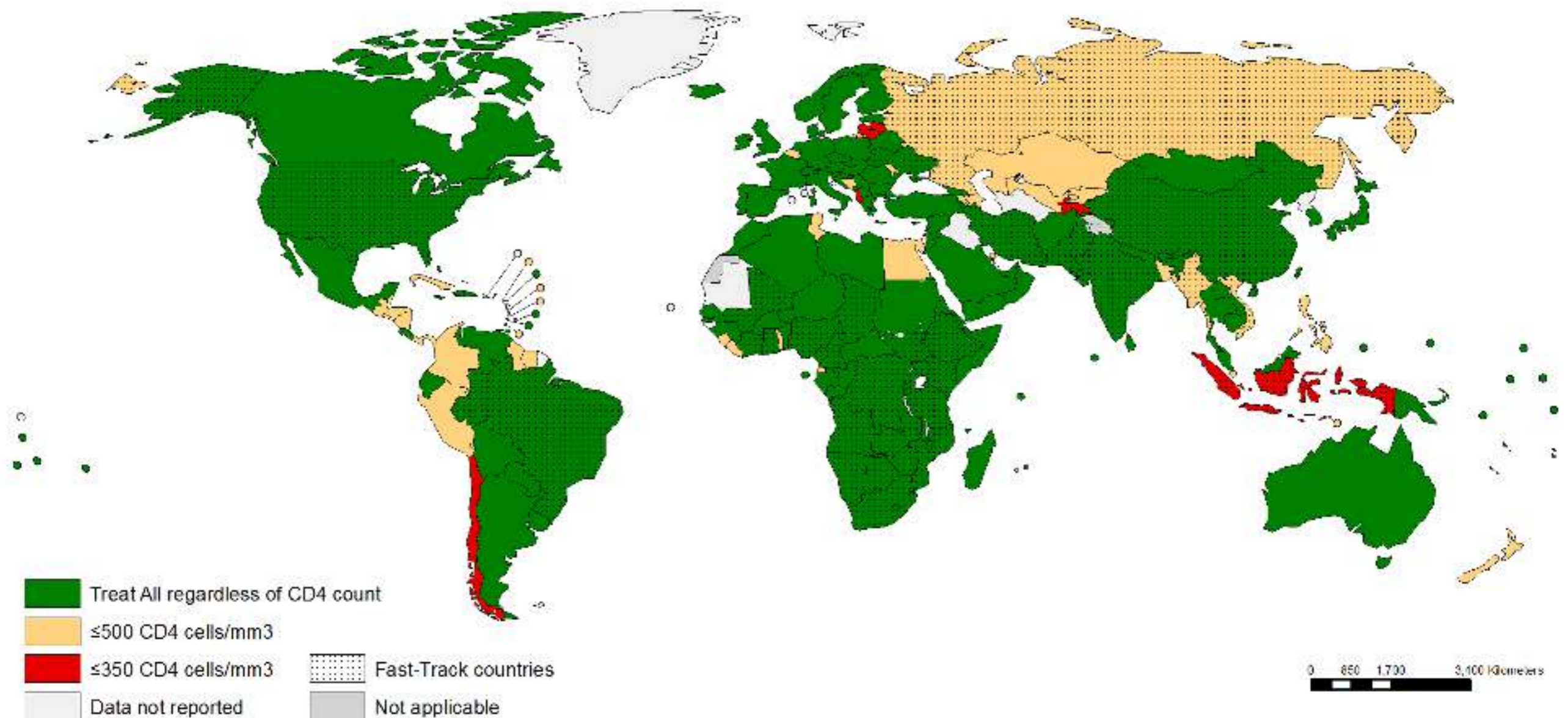
- Test et ve tedavi başla:
Tedaviye başlama eęiđi son on yılda deęiřti
- UNAIDS 2020 hedefi 90-90-90
- UNAIDS 2030 hedefi 95-95-95
- PreP
- Önlemek için tedavi (TasP)
- Maruziyet sonrası profilaksi







Uptake of WHO policy for Treat All ART initiation among adults and adolescents living with HIV (situation as of November 2017)



The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

Data Source: World Health Organization
Map Production: Information Evidence and Research (IER)
World Health Organization



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Türkiye'de durum

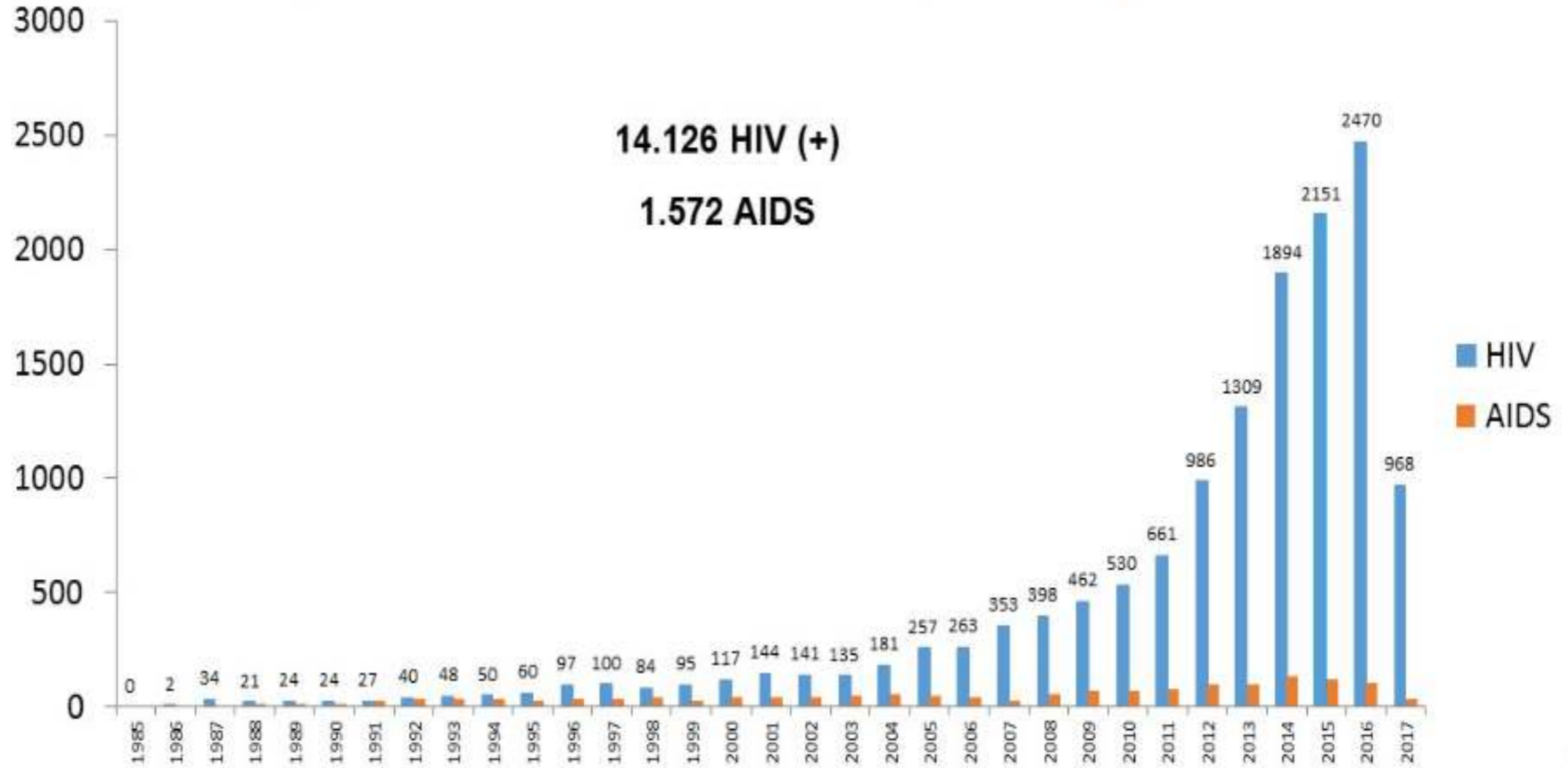




T.C. SAĞLIK BAKANLIĞI

Halk Sağlığı Genel Müdürlüğü

Yıllara Göre HIV/AIDS Vaka Dağılımı (1 Ekim 1985 – 30 Haziran 2017* / TÜRKİYE)

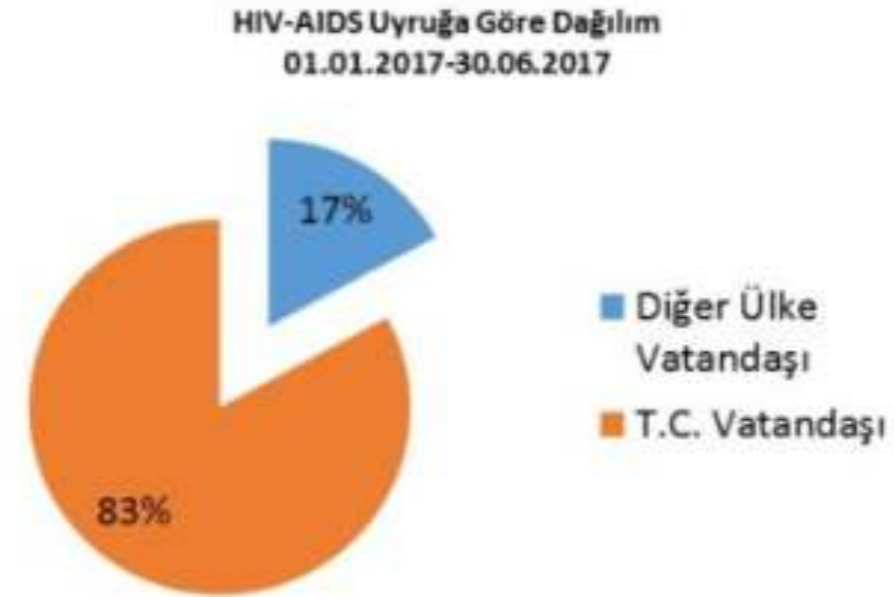
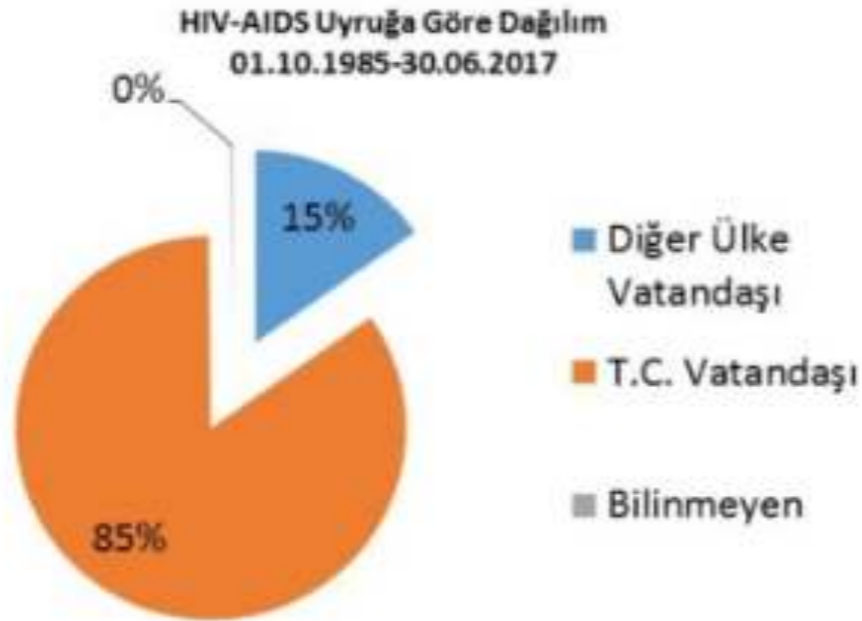


*30 Haziran 2017 itibari ile doğrulama testi pozitif tespit edilerek bildirim yapılan vakaları ifade etmektedir.

Bulaşıcı Hastalıklar Daire Başkanlığı

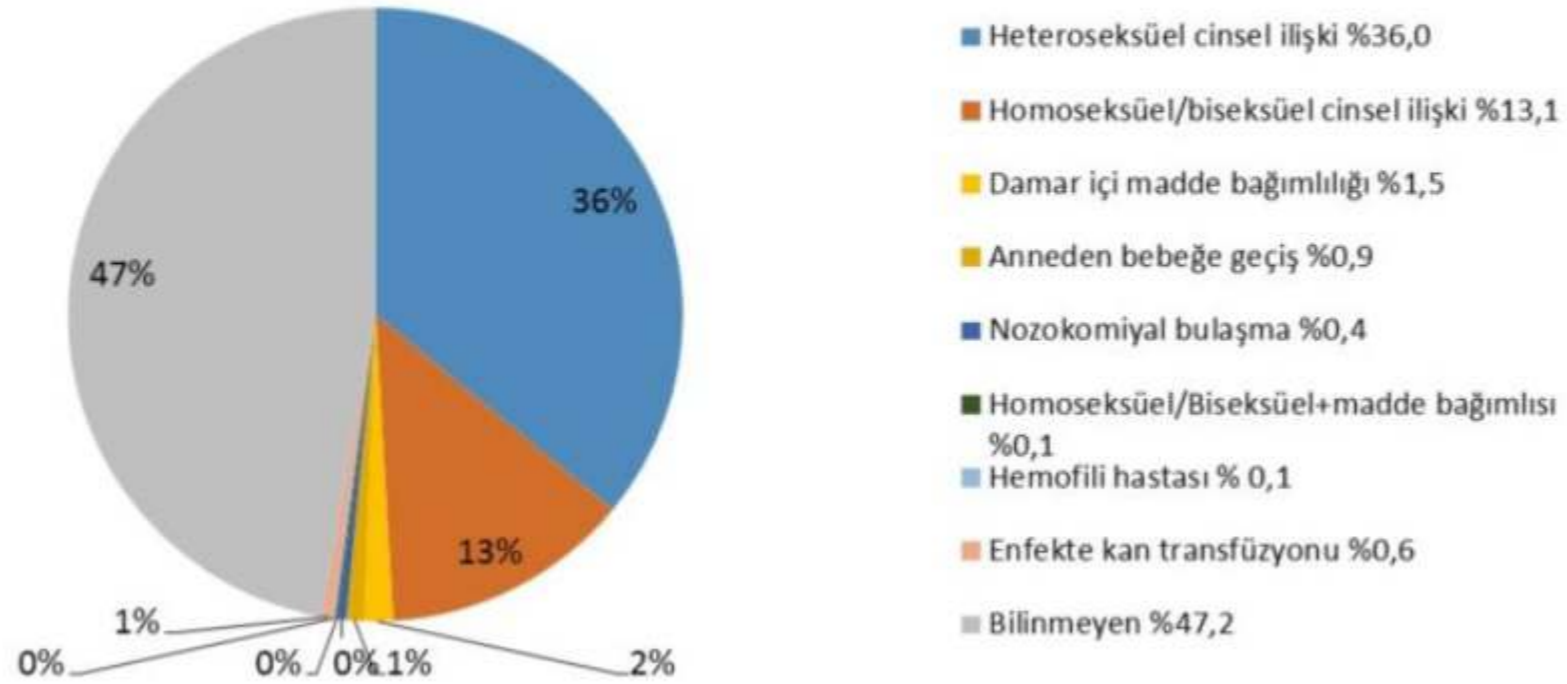


HIV-AIDS Vakalarının Uyuşma Göre Dağılımı





Olası Bulaş Yollarına Göre Vakaların Dağılımı 01.10.1985-30.06.2017, Türkiye



*: 25 Kasım 2016 itibarı ile doğrulama testi pozitif tespit edilerek bildirim yapılan vakaları ifade etmektedir.



- Berktaş M, Ünal S.

Türkiye’de HIV enfeksiyonu ile yaşayan yetişkin sayısının tahmin edilmesi:

23.192

- Sayan M, Hınçal E, Şanlıdağ T, Kaymakamzade B, Saad FT, Baba IA

Türkiye’de HIV/AIDS’in 1985-2016 yılları arasındaki dinamiği:

75.255

Epidemiological Profile of Naïve HIV-1/AIDS Largest Case Series from Turkey[§]

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¹IU, Cerrahpasa Medical School, Department of Infectious Diseases and ²Haseki Education and Research Hospital, Istanbul, Turkey; ³Sisli Etfal Education and Research Hospital, Istanbul, Turkey; ⁴Medeniyet University, Goztepe Education and Research Hospital, Istanbul, Turkey; ⁵Bezmialem Vakif University, Faculty of Medicine, Istanbul, Turkey

Abstract: The aim of the study was to report the epidemiological profile of HIV-1 positive patients from, Istanbul, Turkey, which has one of the lowest HIV-1/AIDS prevalences in Europe. The patients were followed by ACTHIV-IST group which was established by the Infectious Diseases Departments of five teaching hospitals (three university hospitals and two public hospitals) in Istanbul, Turkey. The HIV-1 positive patients were added to the standard patient files in all of the centers; these files were then transferred to the ACTHIV-IST database in the Internet. A total of 829 naïv-untreated HIV-1 positive patients were chosen from the database. The number of male patients was 700 (84.4%) and the mean age of the patients was 37 years (range, 17-79). In our study group 348 (42%) of the patients were married and 318 (38.7%) of the patients were single. The probable route of transmission was heterosexual intercourse in 437 (52.7%) patients and homosexual intercourse in 256 (30.9%) patients. In 519 (62.6%) patients the diagnose was made due to a screening test and in 241 (29.1%) patients, the diagnose was made due to an HIV-related/non-related disease. The mean CD4+ T cell number in 788 of the patients was 357.8/mm³ (±271.1), and the median viral load in 698 of the patients was 100,000 copies/mL (20-9,790,000). In Turkey, the number of HIV-1 positive patients is still low and to diagnose with a screening test is the most common way of diagnostic route.

Keywords: Epidemiology, HIV/AIDS, screening test, Turkey.

829 HIV ile infekte kişi
Erkek: 700 (%84,4)
Evli: 348 (%42)
Heteroseksüel bulaş: 437 (%52,7)
Homoseksüel bulaş: 256 (%30,9)



Contents lists available at ScienceDirect

International Journal of Infectious Diseases

journal homepage: www.elsevier.com/locate/ijid



ACTHIV-IST Çalışma Grubu
2000-2014 yılları arasında
1292 yeni tanı alan hasta
MSM oranında artış yok
Epidemi erken dönem

Changes in HIV demographic patterns in a low prevalence population: no evidence of a shift towards men who have sex with men

Fatma Sargin^{a,*}, Dilek Yildiz^b, Ozlem Altuntas Aydin^c, Bilgul Mete^d, Alper Hayat Kumbasar Karaosmanoglu^c, Mucahit Yemisen^d, Saadet Yazici^a, Sibel Bolukcu^e, Bulent Durdu^e, Ebubekir Senates^f, Resat Ozaras^d, Ilyas Dokmetas^b, Fehmi Tabak^d

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Keywords:

HIV (human immunodeficiency virus)

Demographics

MSM (men who have sex with men)

Epidemiology

SUMMARY

Objectives: This study aimed to examine the changes in HIV demographics over time in an exceptionally low prevalence population, with particular emphasis on men who have sex with men (MSM).

Methods: A total of 1292 newly diagnosed HIV-positive patients registered in the ACTHIV-IST Study Group database between 2000 and 2014 were included. The changes occurring over time in the characteristics of patients at the time of initial admission were examined retrospectively.

Results: A gradual increase in the total number of newly diagnosed patients was evident during the study period; however, it was not possible to show an increase in the proportion of MSM within the study population ($p = 0.63$). There was a male predominance throughout the study (85% vs. 15%), with further increases in the proportion of males in recent years. The mean age was lower at the end of the study ($p < 0.05$) and there was an increase in the number of unmarried patients ($p < 0.05$).

Conclusions: Sexual preference patterns of HIV patients in extremely low prevalence populations may be different, possibly due to an early phase of the epidemic. Nevertheless, MSM still represent a target subgroup for interventions, since they account for a substantial proportion of cases and a resurgent epidemic may be expected among this group in later phases of the epidemic.

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Contents lists available at ScienceDirect

International Journal of Infectious Diseases

journal homepage: www.elsevier.com/locate/ijid



MSM
HIV prevalansı
%12,5

HIV prevalence among men who have sex with men in Istanbul



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Keywords:

HIV (human immunodeficiency virus)

Demographics

MSM (men who have sex with men)

Epidemiology

Prevalence

SUMMARY

Objectives: The re-emergence of the HIV epidemic among men who have sex with men (MSM) represents a serious health issue. This study aimed to assess the HIV prevalence among MSM in a very low prevalence population of a large city.

Methods: A public campaign to raise awareness of HIV infection and to provide access to anonymous testing was conducted in places frequented by MSM and through a mobile phone application. No identity information was requested from individuals contacting the call centre, and anonymous and free HIV testing was offered proactively. Those who agreed to have a test were provided a code number, which was used in blood sampling procedures.

Results: Of 1200 subjects who contacted the call centre, 197 consented to undergo HIV testing and visited the laboratory to give a blood sample. Twenty-five subjects were found to have a reactive ELISA result on two different occasions plus a positive Western blot test result. Thus, the HIV prevalence in this group of MSM was 12.7%.

Conclusions: MSM remain a high risk group for HIV infection in a low prevalence setting, and thus represent a key target population for diagnostic and therapeutic interventions.

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HIV care in Central and Eastern Europe target?☆

Deniz Gokengin^{a,*}, Cristiana Oprea^b, Josip Begovac^c, Dalibor Sedlacek^f, Bayjanov Allabergan^g, Esmira A. Almamedova^h, Tatevik Balayanⁱ, Denes Banhegyi^j, Pavlina Bukovinova^k, Nikoloz Chkhartishvili^l, Alymbaeva Damira^m, Edona Devaⁿ, Ivaylo Elenkov^o, Luljeta Gashi^p, Dafina Gexha-Bunjaku^p, Vesna Hadciosmanovic^q, Arjan Harxhi^r, Tiberiu Holban^s, Djorje Jevtovic^t, David Jilich^u, Justyna Kowalska^d, Djhamal Kuvatova^m, Natalya Ladnaia^v, Adkhamjon Mamatkulov^g, Aleksandra Marjanovic^w, Maria Nikolova^x, Mario Poljak^y, Kristi Rüütel^z, Azzaden Shunnar^k, Milena Stevanovic^A, Zhanna Trumova^B, Oleg Yurin^v

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Orta ve Doğu Avrupa
90-90-90 hedefi
2014 yılı, 24 ülke, 38 soruluk anket
Kan ve organ donörlerinin zorunlu taraması,
iv drug, MSM , seks işçileri, gebe kadınlar
İleri evre hastalık : ülkeler arasında fark yok
Daha yeni ART : daha yüksek gelir statüsü
ART başlarken:
On ülke CD4 + T hücre sayımı ne olursa olsun
Beş ülke <500 hücre
Dokuz ülke <350 hücre
İlaçlar tüm ülkelerde ücretsiz
Ülkeler arasında takip konusunda
önemli tutarsızlıklar bulunmakta

Adherence to Antiretroviral Therapy Results from the ACTHIV-IST

Dilek Yildiz Sevgi,¹ Alper Gunduz,¹ Ozlem Altuntas Aydin,² E
Hayat Kumbasar Karaosmanoglu,² Nuray Uzun,¹ Mucahit Yemisen,³

Abstract

Maintaining optimal adherence to antiretroviral therapy (ART) is essential for the control of HIV infection. The aim of this study is to explore ART adherence rates in a total of 263 HIV-infected patients followed up by the ACTHIV-IST (AIDS Clinical Trials Group) affiliated with four tertiary hospitals. The study population included patients 18 years of age or older who were on ART for over 12 months. Adherence was assessed by the medication possession ratio (MPR) calculated for each patient using data (a list of all drugs dispensed within the previous year for that patient) obtained from pharmacy medication records. In addition, patients completed a self-report questionnaire addressing missed doses and the AIDS Clinical Trials Group (ACTG) adherence questionnaire. The study was reviewed and approved by the Ethics Committee of Cerrahpasa Medical Faculty. Patient ages ranged from 19 to 71 years. Two hundred and thirty-one patients were male (88%). Two hundred and twenty-four patients (85%) had optimal adherence (MPR \geq 95%). During the course of ART, 236 patients (90%) reported no missed doses in the past 4 days of their treatment, whereas 206 patients (78%) reported no missed doses in the past month. Simply forgetting was the most common reason for nonadherence. MPR was associated with virologic rebound. Major factors affecting adherence were being female, taking antituberculosis drugs, having an opportunistic infection, being able to take all or most of the medication as directed, and being aware of the need to take medication exactly as instructed to prevent the development of drug resistance. Adherence to ART measured by MPR and self-report surveys is relatively high in Turkey when compared with other countries, which probably led to high ART success rates.

Keywords: ART adherence, HIV, Turkey

En az 1 yıldır tedavi alan 263 hasta
MPR, ACTG, Geri bildirim
Tedavi bağlılığı: %85
En sık neden unutmak
Olumsuz ilişki:
Kadın, fırsatçı infeksiyon, antitbc,
ek ilaç kullanımı
Olumlu ilişki:
İlacı kullanabileceğinden emin
olma, ilacı almadığında direnç
gelişebileceğinin farkında olma



**AIDS İLE
MÜCADELEYE
SEYİRCİ
KALMA!**

- **KORUN!**
- **FARKINDA OL!**
- **DESTEKLE!**
- **TEST YAPTIR!**



Teşekkür