Ülkemizden Öne Çıkan Çalışmalar

Uzm. Dr. Fatma Yılmaz Karadağ

İstanbul Medeniyet Üniversitesi Göztepe Eğitim ve Araştırma Hastanesi

Epidemiological Profile of Naïve HIV-1/AIDS Patients in Istanbul: The Largest Case Series from Turkey[§]

Mucahit Yemisen[1], Özlem Altuntaş Aydın[2], Alper Gündüz[3], Nail Özgüneş[4], Bilgul Mete[*1], Bahadir Ceylan[5], Hayat Kumbasar Karaosmanoğlu[2], Dilek Yıldız[3], Fatma Sargın[4], Resat Özaras[1] and Fehmi Tabak[1]

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

Current HIV Research, 2014, *12*, 000-000

Epidemiological Profile of Naïve HIV-1/AIDS Patients in Istanbul: The Largest Case Series from Turkey§

Mucahit Yemisen[1], Özlem Altuntaş Aydın[2], Alper Gündüz[3], Nail Özgüneş[4], Bilgul Mete[*,1], Bahadir Ceylan[5], Hayat Kumbasar Karaosmanoğlu[2], Dilek Yıldız[3], Fatma Sargın[4], Resat Özaras[1] and Fehmi Tabak[1]

Amaç: İstanbul'daki HIV-1 pozitif hastaların epidemiyolojik profilini incelemek

Yöntem: ACTHIV-IST çalışma grubu verileri

3 tane üniversite, 2 tane devlet hastanesi

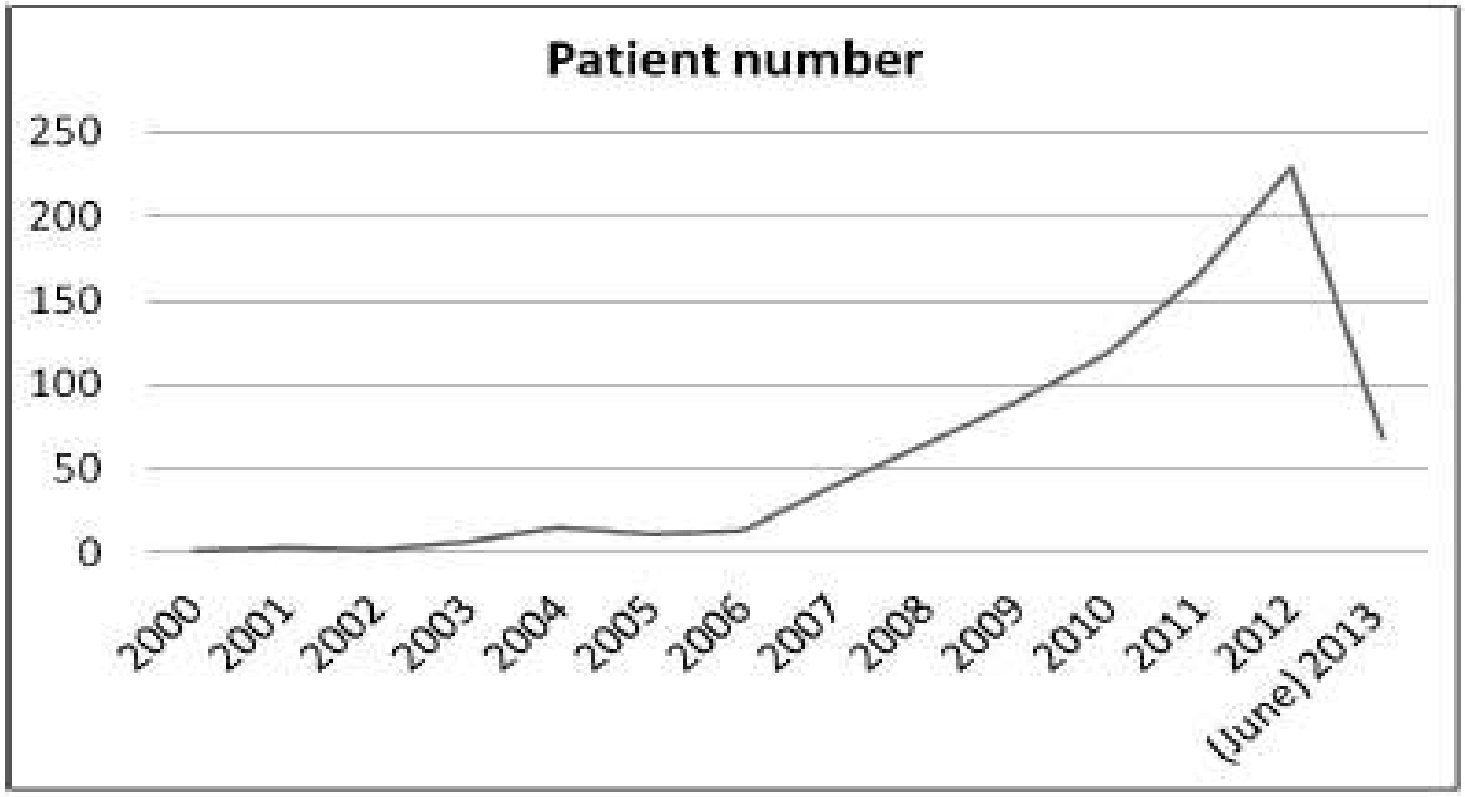
Ocak 2000- Haziran 2013

Toplam 829 naive HIV-1 infekte hasta

Current HIV Research, 2014, *12*, 000-000

Epidemiological Profile of Naïve HIV-1/AIDS Patients in Istanbul: The Largest Case Series from Turkey[§]

Mucahit Yemisen[1], Özlem Altuntaş Aydın[2], Alper Gündüz[3], Nail Özgüneş[4], Bilgul Mete[*,1], Bahadir Ceylan[5], Hayat Kumbasar Karaosmanoğlu[2], Dilek Yıldız[3], Fatma Sargın[4], Resat Özaras[1] and Fehmi Tabak[1]



Epidemiological Profile of Naïve HIV-1/AIDS Patients in Istanbul: The Largest Case Series from Turkey[§]

Mucahit Yemisen[1], Özlem Altuntaş Aydın[2], Alper Gündüz[3], Nail Özgüneş[4], Bilgul Mete[*,1], Bahadir Ceylan[5], Hayat Kumbasar Karaosmanoğlu[2], Dilek Yıldız[3], Fatma Sargın[4], Resat Özaras[1] and Fehmi Tabak[1]

Table 2. Demographic Properties of the Patients

Characteristic	n (%)
Gender	
Male	700 (84.4%)
Female	129 (15.6%)
Mean age	37.5 (±11.3)
Age groups	
≤20	20 (2.4%)
21-30	243 (29.3%)
31-40	256 (30.9%)
41-50	197 (23.8%)
51-60	82 (9.9%)
>60	31 (3.7%)
Marital Status	
Married	348 (42%)
Single	318 (38.5%)
Divorced/Widowed	66 (8%)
NS	97 (11.5%)
Education Level	
Only literate	285 (%34.4)
Elementary school	140 (%16.8)
Secondary school	63 (%7.6)
High school	143 (%17.2)
University	196 (23.7%)
NS	2(%0.3)

NS: not specified.

Current HIV Research, 2014, *12*, 000-000

Epidemiological Profile of Naïve HIV-1/AIDS Patients in Istanbul: The Largest Case Series from Turkey[§]

Mucahit Yemisen[1], Özlem Altuntaş Aydın[2], Alper Gündüz[3], Nail Özgüneş[4], Bilgul Mete[*,1], Bahadir Ceylan[5], Hayat Kumbasar Karaosmanoğlu[2], Dilek Yıldız[3], Fatma Sargın[4], Resat Özaras[1] and Fehmi Tabak[1]

Table 4. Type of Diagnosis in Male and Female Patients

Type of Diagnosis	Male	Female
With a clinic symptom	213 (30.4%)	28 (21.7%)
NS	62(8.9%)	7 (5.5%)
Screening test	425 (60.7%)	94 (72.8%)
Positive partner	54 (12.7%)	42 (44.7%)
Blood donation	70 (16.4%)	2 (2.1%)
Pre-operative	87 (20.5%)	14 (14.8%)
After sex	41 (9.6%)	1 (1.1%)
Job application	28 (6.6%)	0
Before wedding	18 (4.3%)	9 (9.6%)
Pregnancy	0	16 (17%)
Routine check-up	46 (10.8%)	3 (3.3%)
Others	81 (19.1%)	7 (7.4%)

NS: not specified

Current HIV Research, 2014, *12*, 000-000

Epidemiological Profile of Naïve HIV-1/AIDS Patients in Istanbul: The Largest Case Series from Turkey[§]

Mucahit Yemisen[1], Özlem Altuntaş Aydın[2], Alper Gündüz[3], Nail Özgüneş[4], Bilgul Mete[*,1], Bahadir Ceylan[5], Hayat Kumbasar Karaosmanoğlu[2], Dilek Yıldız[3], Fatma Sargın[4], Resat Özaras[1] and Fehmi Tabak[1]

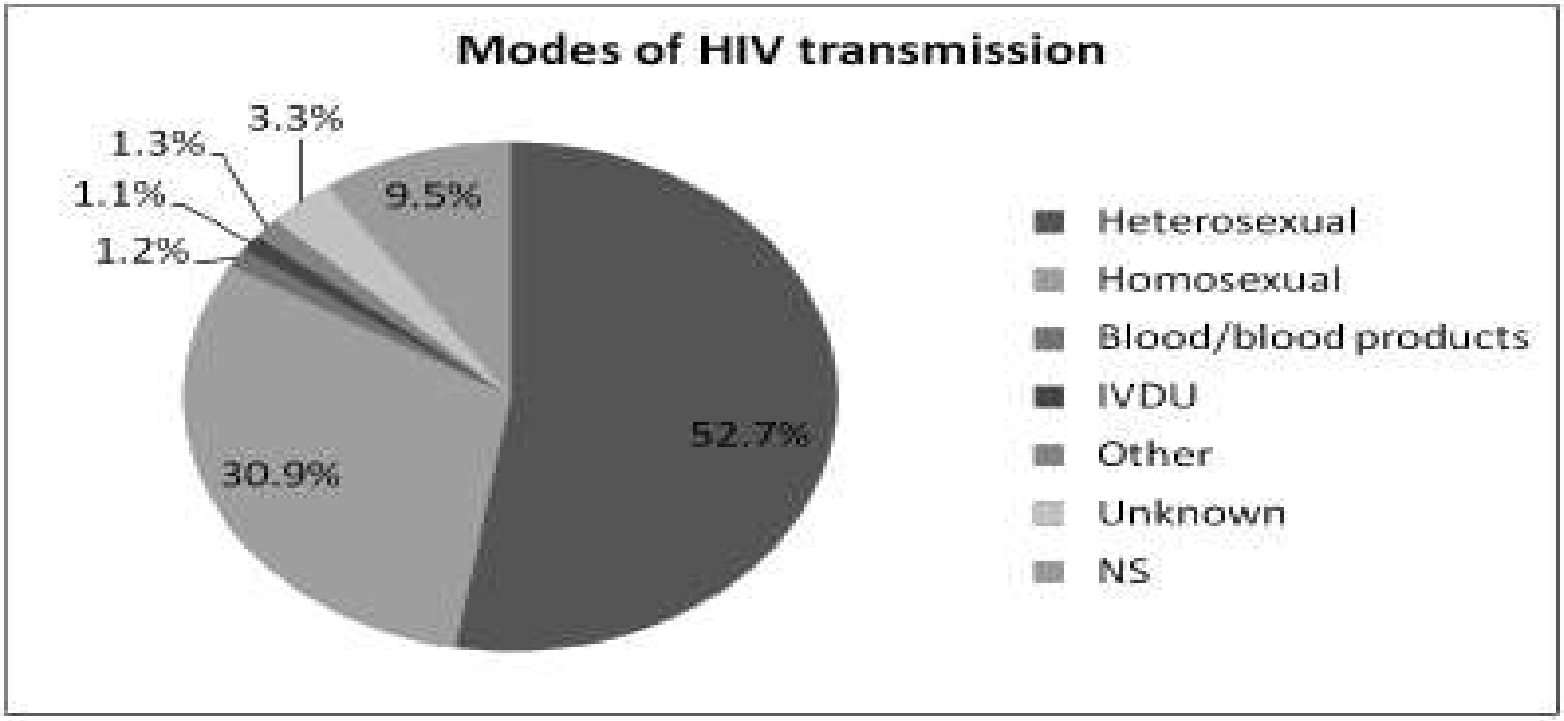


Fig. (2). Modes of HIV transmission.

Current HIV Research, 2014, *12*, 000-000

Epidemiological Profile of Naïve HIV-1/AIDS Patients in Istanbul: The Largest Case Series from Turkey§

Mucahit Yemisen[1], Özlem Altuntaş Aydın[2], Alper Gündüz[3], Nail Özgüneş[4], Bilgul Mete[*,1], Bahadir Ceylan[5], Hayat Kumbasar Karaosmanoğlu[2], Dilek Yıldız[3], Fatma Sargın[4], Resat Özaras[1] and Fehmi Tabak[1]

Table 5. Clinical Properties of the Patients

	n (Within All Patients) (%)
Comorbid Diseases	
DM	32 (3.9%)
HT	37 (4,5%)
COPD	13 (1.6%)
Frequent Clinical Findings on Admission	
Fever, weight loss, fatigue	35 (4.2%)
Oral candidiasis	21 (2.5%)
Kaposi sarcoma	13 (1.5%)
PJP	12 (1.4%)
Rash and itching	10(1.2%)
Chronic diarrhea	9 (1.1%)
CD4 Count	
<200	252 (30.4%)
200-349	189 (22.8%)
>350	347 (41.9)
NS	41(4.9%)
Mean CD4 count	357.8/mm^3 (±271.1)
Median HIV RNA	100000 cop/mL (20-9790000)

PJP: Pneumocystis jiroveci pneumonia, DM: Diabetes mellitus, HT: hypertension, COPD: Chronic obstructive pulmonary disease, NS: not specified.

HIV Clinical Trials

Taylor & Francis

ISSN: 1528-4336 (Print) 1945-5771 (Online) Journal homepage: http://www.tandfonline.com/loi/yhct20

Evaluation of epidemiological, clinical, and laboratory features and mortality of 144 HIV/AIDS cases in Turkey

Burcu Ozdemir, Meltem A. Yetkin, Aliye Bastug, Ayşe But, Halide Aslaner, Esragul Akinci & Hurrem Bodur

To cite this article: Burcu Ozdemir, Meltem A. Yetkin, Aliye Bastug, Ayşe But, Halide Aslaner, Esragul Akinci & Hurrem Bodur (2018): Evaluation of epidemiological, clinical, and laboratory features and mortality of 144 HIV/AIDS cases in Turkey, HIV Clinical Trials, DOI: 10.1080/15284336.2018.1453990

To link to this article: https://doi.org/10.1080/15284336.2018.1453990

Amaç: Epidemiyoloji, bulaşma yolları, mortalite için risk faktörlerini tespit etmek

Metot: Retrospektif çalışma, 2000-2015 yılları arası 144 HIV pozitif hastalar incelenmiş.

Original Article

Evaluation of epidemiological, clinical, and laboratory features and mortality of 144 HIV/AIDS cases in Turkey

Hastaların dağılımı

- 2009 öncesi : % 46.5 ; 2009 sonrası: % 53.5

HIV pozitif saptanan hastalar

- Şikayet yok: % 55.2
- Şikayeti olanlar : % 48.2

    *Ateş: % 15.4

    *Halsizlik: %12.5

    *Yorgunluk ve iştah kaybı : %16.9

Original Article

Evaluation of epidemiological, clinical, and laboratory features and mortality of 144 HIV/AIDS cases in Turkey

***Bulaşma Yolları**

- ✓ Heteroseksüel bulaşma : % 61.1
- ✓ Homoseksüel bulaşma : % 5.6
- ✓ İntravenöz ilaç kullanımı : %3.5
- ✓ Bilinmeyen: %29.5

Başvuru HIV RNA > 100.000 kopya/ml** ***(p=0.03) (erkek)

- ✓ HIV RNA > 100 000 kopya/ml : % 45
- ✓ HIV RNA < 1000 000 kopya/ml: % 55

CD4 sayısı (ortanca): 214 hücre/µL** ***(p= 0.003)

- ✓ 2009 yılı öncesi CD4 sayısı = 108
- ✓ 2009 yılı sonrası CD4 sayısı = 265

Original Article

Evaluation of epidemiological, clinical, and laboratory features and mortality of 144 HIV/AIDS cases in Turkey

Table 1 Distribution of HIV/AIDS stages according to the CDC criteria

Stage	*n*	%
A	78	54.9
B	40	28.2
C	24	16.9
Total	142	100
Subgroup of stage		
A1	23	16.2
A2	34	23.9
A3	21	14.8
B1	3	2.1
B2	8	5.6
B3	29	20.4
C1	2	1.4
C2	6	4.2
C3	16	11.3
Total	142	100

Table 2 Distribution of malignancies and opportunistic infections

	n	%	95% Confidence interval
Tuberculosis	10	31.3	15.6–46.9
Condyloma acuminatum	8	25.0	9.4–40.6
Pneumocystis Jiroveci pneumonia	2	6.3	0.0–15.6
Syphilis	1	3.1	0.0–9.4
Cryptococcal Meningitis	1	3.1	0.0–9.4
Zona zooster	1	3.1	0.0–9.4
Malignancy			
Lymphoma	4	12.5	3.1–25.0
Other malignancy[a]	4	12.5	3.1–25.0
Kaposi sarcoma	1	3.1	0.0–9.4
Total	32	100	

[a]Squamous cell carcinoma, multiple myeloma, lung cancer, cervical cancer.

Original Article

Evaluation of epidemiological, clinical, and laboratory features and mortality of 144 HIV/AIDS cases in Turkey

Table 3 Comparison of initial treatment year, CD4 + T-lymphocyte cell count, HIV RNA loads and year at presentation according to survival

	Non-survivors *n* (%)	Survivors *n* (%)	*p*
Presentation year			
<2009	37 (82.2)	30 (30.3)	<0.001
≥2009	8 (17.8)	69 (69.7)	
Total (*n*)	45	99	
Treatment initial year			
<2009	18 (69.2)	22 (23.9)	<0.001
≥2009	8 (30.8)	70 (76.1)	
Total (*n*)	26	92	
CD4 + T-lymphocyte cell count at presentation (median [IQR])	81 (298)	231 (386)	0.002
0–49	17 (13.4)	13 (13.4)	0.007
50–199	8 (19.5)	29 (29.9)	
200–349	7 (17.1)	17 (17.5)	
350–500	5 (12.2)	14 (14.4)	
500+	4 (9.8)	24 (24.7)	
Total (*n*)	41	97	
HIV-RNA (median [IQR])	296,500 (692,475)	125,000 (454,086)	0.28
<100.000	9 (37.5)	40 (47.1)	0.48
≥100.000	15 (62.5)	45 (52.9)	
Total (*n*)	24	85	

The difference in the number of patients in the variables is a result of the inability to contact some of the patients.
$p < 0.05$ is considered statistically significant.

Clinical Findings of Pediatric HIV Infection in a Tertiary Center in Turkey

Murat Sütçü[1], Manolya Acar[1], Hacer Aktürk[1], Selda Hançerli Torun[1], Hayati Beka[2], Ali Ağaçfidan[2], Nuran Salman[1], Ayper Somer[1]

[1]Department of Pediatric Infectious Diseases, İstanbul University İstanbul School of Medicine, İstanbul, Turkey
[2]Department of Clinical Microbiology, İstanbul University İstanbul School of Medicine, İstanbul, Turkey

Background: Paediatric HIV infection is different from the adult type of disease in many ways, including transmission routes, clinical findings and treatment strategies.

Aims: To evaluate clinical data of paediatric patients with HIV disease.

Study Design: Retrospective cross-sectional study.

Methods: The charts of 22 paediatric patients diagnosed with HIV infection in our clinic during a 14 year period through 2001-2015 were retrospectively analysed. Clinical data, laboratory findings, treatment modalities and outcomes were recorded.

Results: The mean age of diagnosis 61.9±49.2 months and the mean follow-up period was 60.3±37.5 months. Seven patients (31.8%) were foreigners and the most common transmission route was vertical transmission (n=16, 72.7%). The most common presenting symptom and the sign were history of recurrent upper respiratory tract infections (n=8, 36.4%) and lymphadenopathy (n=12, 54.5%), respectively. Recurrent pneumonia (n=6, 27.3%), prolonged fever (n=5, 22.7%), recurrent otitis media (n=4, 18.2%), and gastroenteritis (n=4, 18.2%) were other clinical symptoms. Other than bacterial sinopulmonary infections, tuberculosis was the most frequent opportunistic infection (n=3, 13.6%). Mortality occurred in two patients (9.1%).

Conclusion: Although mostly vertically transmitted, HIV infection may be diagnosed throughout the childhood. Frequently encountered signs and symptoms may be the reason for doctor admission. High clinical suspicion together with detailed anamnestic data and physical findings constitute the basis for pediatric HIV diagnosis.

Keywords: Child, HIV infection, Turkey

Clinical Findings of Pediatric HIV Infection in a Tertiary Center in Turkey

Murat Sütçü[1], Manolya Acar[1], Hacer Aktürk[1], Selda Hançerli Torun[1], Hayati Beka[2], Ali Ağaçfidan[2], Nuran Salman[1], Ayper Somer[1]

Amaç: HIV hastalığı olan pediyatrik hastaların klinik verilerini değerlendirmek.

Çalışma Tasarımı: Retrospektif kesitsel çalışma

Yöntem: 2001-2015 yılları arasında HIV infeksiyonu nedeni ile takip edilen 22 pediatrik hastaların klinik verileri, laboratuvar bulguları ve tedavi yöntemleri hasta dosyalarından kayıt edilmiş.

Clinical Findings of Pediatric HIV Infection in a Tertiary Center in Turkey

Murat Sütçü[1], Manolya Acar[1], Hacer Akttürk[1], Selda Hançerli Torun[1], Hayati Beka[2], Ali Ağaçfidan[2], Nuran Salman[1], Ayper Somer[1]

TABLE 1. Characteristics of HIV infected children

Parameter	n (%)
Male	9 (40.9%)
Mean age of diagnosis (median, range months)	61.9±49.2
Ethnicity	
TC*	15 (68.1)
Uzbekistan	5 (22.7)
Russia	1 (4.5)
Romania	1 (4.5)
Transmission route (n, %)	
Vertical	16 (72.7)
Operation	3 (13.6)
Dentistry application	2 (9.1)
Undetermined	1 (4.5)
WHO** clinical staging	
Stage 1	3 (13.6)
Stage 2	1 (4.5)
Stage 3	5 (22.7)
Stage 4	13 (59.1)
Age at presentation	
<1 years	5 (22.7)
1-5 years	7 (31.8)
≥6 years	10 (45.4)

Balkan Med J 2017;34:239-43

Clinical Findings of Pediatric HIV Infection in a Tertiary Center in Turkey

Murat Sütçü[1], Manolya Acar[1], Hacer Akttürk[1], Selda Hançerli Torun[1], Hayati Beka[2], Ali Ağaçfidan[2], Nuran Salman[1], Ayper Somer[1]

- Hem anne hemde baba HIV pozitif : 11 (%50)
- Sadece anne HIV pozitif : 5 (%22.7)
- Kardeş HIV pozitif : 3 (%13.6)
- Vertikal yolla bulaşma en sık (% 72.7)

TABLE 2. Clinical presentation of patients

Signs and symptoms	n (%)
Recurrent URTI	8 (36.4)
Recurrent pneumonia	6 (27.3)
Prolonged fever	5 (22.7)
Recurrent otitis media	4 (18.2)
Recurrent/chronic gastroenteritis	4 (18.2)
Weight loss	1 (4.5)
Recurrent parotitis	1 (4.5)
Isolated thrombocytopenia	1 (4.5)
Pancytopenia	1 (4.5)
Dermatological findings	12 (54.5)
Non-specific maculopapular rash	2 (9.1)
Diaper dermatitis	2 (9.1)
Eczematous skin lesions	2 (9.1)
Molluscum contagiosum	1 (4.5)
Vesicular eruption	1 (4.5)
Persistent monoliasis	1 (4.5)
Scabies	1 (4.5)
Lymphadenopathy	12 (54.5)
Splenomegaly	11 (50)
Hepatomegaly	10 (45.5)
Pathological breath sounds	4 (18.2)
Growth retardation	3 (13.6)
Wasting syndrome	1 (4.5)

URTI: upper respiratory tract infections

Clinical Findings of Pediatric HIV Infection in a Tertiary Center in Turkey

Murat Sütçü[1], Manolya Acar[1], Hacer Aktürk[1], Selda Hançerli Torun[1], Hayati Beka[2], Ali Ağaçfidan[2], Nuran Salman[1], Ayper Somer[1]

TABLE 3. HAART regimen at last patient visit

Drug	n	%	Modification reason
Lamivudine + zidovudine + lopinavir/ritonavir	16	72.7	-
Lamivudine + tenofovir + lopinavir/ritonavir	1	4.5	Drug side effect
Lamivudine + zidovudine + ritonavir	1	4.5	Drug side effect
Tenofovir + zidovudine + lopinavir/ritonavir	2	9.1	Lamivudin resistance
Lamivudine + zidovudine + indinavir	1	4.5	Drug side effect
Lamivudine + tenofovir + nevirapine	1	4.5	HBV+HCV co-infection

HAART: highly active antiretroviral treatment; HBV: hepatitis B virus; HCV: hepatitis C virus

Balkan Med J 2017;34:239-43

Clinical Findings of Pediatric HIV Infection in a Tertiary Center in Turkey

Murat Sütçü[1], Manolya Acar[1], Hacer Akttürk[1], Selda Hançerli Torun[1], Hayati Beka[2], Ali Ağaçfidan[2], Nuran Salman[1], Ayper Somer[1]

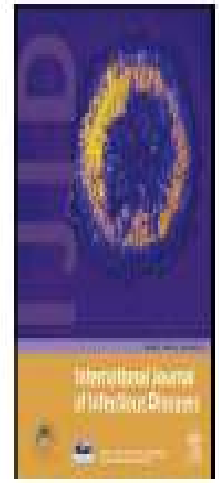
- En sık gözlenen fırsatçı infeksiyon
  - * Tüberküloz
  - * Bakteriyel sinopulmoner infeksiyon
- Mortalite oranı = % 9.1 (2/22)
  - *15 yaş , NHL
  - * 4 aylık bebek ASYE

International Journal of Infectious Diseases 54 (2017) 58–61

Contents lists available at ScienceDirect

International Journal of Infectious Diseases

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



HIV prevalence among men who have sex with men in Istanbul

Fatma Sargin [a,*], Safak Goktas [b]

[a] Department of Infectious Diseases and Clinical Microbiology, Istanbul Medeniyet University, Gaztepe Training and Research Hospital, Istanbul, Turkey
[b] Private Gelisim Laboratories, Istanbul, Turkey

HIV prevalence among men who have sex with men in Istanbul

Fatma Sargin [a,*], Safak Goktas [b]

[a] Department of Infectious Diseases and Clinical Microbiology, Istanbul Medeniyet University, Goztepe Training and Research Hospital, Istanbul, Turkey
[b] Private Gelisim Laboratories, Istanbul, Turkey

Amaç: İstanbul'da yaşayan MSM'lede HIV prevalansını değerlendirmek

Yöntem

- Mart 2015-Kasım 2015 tarihleri arasında Pozitif Yaşam Derneği' tarafından HIV konusunda farkındalık yaratmak için bir organizasyon yapılıyor.
- HIV testinin önemi, risk grubundaki kişilerde erken tanının önemi vurgulanıyor. Ücretsiz olarak bu testi yapılabileceği ve istedikleri zaman arayabilecekleri çağrı merkezi numarası veriliyor.

HIV prevalence among men who have sex with men in Istanbul

Fatma Sargin [a,*], Safak Goktas [b]

[a] Department of Infectious Diseases and Clinical Microbiology, Istanbul Medeniyet University, Goztepe Training and Research Hospital, Istanbul, Turkey
[b] Private Gelisim Laboratories, Istanbul, Turkey

1200 kişi

Çağrı merkezini aramış

↓

197 kişi

HIV testi yaptırmayı kabul etmiş

↓

26 kişi anti HIV pozitif

Western Blot test pozitif 25 kişi

HIV prevalence among men who have sex with men in Istanbul

Fatma Sargin [a,*], Safak Goktas [b]

[a] Department of Infectious Diseases and Clinical Microbiology, Istanbul Medeniyet University, Goztepe Training and Research Hospital, Istanbul, Turkey
[b] Private Gelisim Laboratories, Istanbul, Turkey

- HIV prevalansı % 12.7
- Korunmasız cinsel ilişki, birden fazla partner öyküsü
- Dört kişi yabancı uyruklu, kaçak olarak Türkiye'de yaşıyor

TÜBİTAK

Turkish Journal of Medical Sciences

http://journals.tubitak.gov.tr/medical/

Research Article

Turk J Med Sci
(2017) 47: 69-75
© TÜBİTAK
doi:10.3906/sag-1510-140

Prevalence and associated factors of thrombocytopenia among human immunodeficiency virus-infected patients at a tertiary care hospital in İzmir, Turkey

Can Hüseyin HEKİMOĞLU[1,*], Figen KAPTAN[2], İlknur VARDAR[2], Serap URAL[2], Nesrin TÜRKER[2], Bahar ÖRMEN[2], Nurbanu SEZAK[2], Sibel EL[2]

[1]Division of Epidemiology, Department of Public Health, Faculty of Medicine, Dokuz Eylül University, İzmir, Turkey

[2]Department of Infectious Diseases and Clinical Microbiology, Atatürk Training and Research Hospital, İzmir Kâtip Çelebi University, İzmir, Turkey

Received: 29.10.2015 • Accepted/Published Online: 29.04.2016 • Final Version: 27.02.2017

Prevalence and associated factors of thrombocytopenia among human immunodeficiency virus-infected patients at a tertiary care hospital in İzmir, Turkey

Amaç

HIV ile infekte olan hastalarda trombositopeni sıklığı ve trombositopeni neden olan faktörlerin belirlenmesi

Yöntem

*Kesitsel çalışma, İzmir, Üçüncü Basamak Hastane

* 2006-2011 yılları arasında takip edilen trombositopeni gelişen (vaka grubu), trombositopeni gelişmeyen (kontrol grup) HIV infekte hastalar incelenmiş

Prevalence and associated factors of thrombocytopenia among human immunodeficiency virus-infected patients at a tertiary care hospital in İzmir, Turkey

- 95 hastanın 34'de (% 35.8) trombositopeni mevcut
- 95 hastanın 6 ölmüş (AİDS, NHL; akciğer Ca, karaciğer sirozu, rektal yassı hücre Ca)
- Ölen 6 hastanın 5 'de trombositopeni var

Table 2. Characteristics of 34 HIV-infected patients with thrombocytopenia.

Parameter	Results
Sex, % (n) Male Female	 88.2 (30) 11.8 (4)
Median age at the time of diagnosis (range, years)	37 (16–71)
Thrombocytopenia at first admission, % (n) Thrombocytopenia during follow-up Thrombocytopenia while receiving cART	52.9 (18) 47.1 (16) 35.3 (12)
Isolated thrombocytopenia, % (n) Thrombocytopenia and anemia Thrombocytopenia and neutropenia Pancytopenia	32.4 (11) 20.6 (7) 2.9 (1) 44.1 (15)
Platelet count, % (n) 101,000–150,000/μL 50,000–100,000/μL <50,000/μL	 32.4 (11) 38.2 (13) 29.4 (10)
Duration of thrombocytopenia, % (n) <3 months ≥3 months	 52.9 (18) 47.1 (16)
Bleeding, % (n)	11.8 (4)
Administration of fresh frozen plasma, % (n)	14.7 (5)
Exitus, (%) n	14.7 (5)

Prevalence and associated factors of thrombocytopenia among human immunodeficiency virus-infected patients at a tertiary care hospital in İzmir, Turkey

Table 4. Comparison of patients with thrombocytopenia (cases) and without thrombocytopenia (controls) regarding categorical variables.

Parameter	Cases (n = 34) % (n)	Controls (n = 61) % (n)	P-value
HBsAg positivity	2.9 (1)	6.5 (4)	> 0.05*
Anti-HCV positivity	14.7 (5)	0.0 (0)	<0.05*
Anti-Delta positivity	2.9 (1)	1.6 (1)	>0.05*
VDRL positivity	8.8 (3)	9.8 (6)	>0.05*
AIDS diagnosis	64.7 (22)	34.4 (21)	<0.05
History of:			
cART usage	38.2 (13)	91.8 (56)	<0.05
Comorbid diseases	67.6 (23)	57.3 (35)	>0.05
Malignancy	8.8 (3)	4.9 (3)	>0.05*
Chemotherapy	5.8 (2)	1.6 (1)	>0.05*
CMV infection	14.7 (5)	3.2 (2)	>0.05*
TMP/SMX prophylaxis	50.0 (17)	29.5 (18)	<0.05
Azithromycin prophylaxis	41.7 (8)	3.2 (9)	>0.05
Fluconazole treatment	20.5 (7)	21.3 (13)	>0.05
Opportunistic infections	42.9 (6)	57.1 (8)	>0.05
Tuberculosis coinfection	17.6 (8)	7.8 (5)	<0.05*
Antituberculosis therapy	20.5 (7)	8.1 (5)	>0.05*

Prevalence and associated factors of thrombocytopenia among human immunodeficiency virus-infected patients at a tertiary care hospital in İzmir, Turkey

SONUÇ:

1- İlerlemiş ve tedavi edilmemiş HIV infekte hastalarda trombositopeni gelişme riski yüksek bulunmuş

- CD+ sayısı düşük olması
- AİDS hastalığı
- Trimetoprim-sulfametaksazol profilaksi kullanımı

2- Tüberküloz

3- HCV bağlı siroz

AIDS Research and Human Retroviruses

DOI: 10.1089/AID.2016.0266

Adherence to Antiretroviral Therapy in Turkey: Results from the ACTHIV-IST Study Group

Dilek Yildiz Sevgi[1], Alper Gunduz[1], Ozlem Altuntas Aydin[2], Bilgul Mete[3], Fatma Sargin[4], H. Kumbasar Karaosmanoglu[2], Nuray Uzun[1], Mucahit Yemisen[3], Ilyas Dokmetas[1], Fehmi Tabak[3]

Adherence to Antiretroviral Therapy in Turkey: Results from the ACTHIV-IST Study Group

Amaç: Antiretroviral tedaviye uyum oranlarını araştırmak

Yöntem

- Kesitsel bir çalışma
- Mart 2014- Mart 2015 yılları arasında en az 12 ay ART kullanımı
- İstanbul'da dört farklı üniversite hastanesi
- Sosyodemografik bilgiler dosyalardan
- Anket uygulandığı zamanki kontrol HIV RNA ve CD4 sayısı

Adherence to Antiretroviral Therapy in Turkey: Results from the ACTHIV-IST Study Group

Değerlendirmede 3 farklı hesaplama yapılmış

1- Medication possession ratio (MPR) hesaplanması

2- Self report anket (son 4 gün, son bir hafta, son bir ay , son üç ay için atladığı ilaç dozunu tespit etmek)

3- AIDS Klinik Araştırmalar Grubunun ilaç uyum anket

Adherence to Antiretroviral Therapy in Turkey: Results from the ACTHIV-IST Study Group

Adherence to Antiretroviral Therapy in Turkey: Results from the ACTHIV-IST Study Group

Age (years), Mean±SD		41.0 ± 11.0	
Duration of treatment (months), Mean±SD		34.1 ± 21.9	
CD4 cell count (cells/mm^3), median±SD		484 ± 268	
Viral load (copies/mL), median±SD		116.409 ± 554504	
		n	%
Gender	Female	32	12.2
	Male	231	87.8
Employment status	Unemployed	48	18.3
	Employed	173	65.8
	Retired	21	8.0
	Housewife	21	8.0
Marital Status	Married	116	44.1
	Single	127	48.2
	Widow-Widower	20	7.6
Education Level	11th Grade or less	102	38.8
	High school graduate	67	25.5
	University	94	35.7
Previous use of Co-trimoxazole	Yes	39	14.8
	No	224	85.2
Previous use of antituberculosis drugs	Yes	5	1.9
	No	258	98.1
Opportunistic Infections	Yes	26	9.9
	No	237	90.1
Use of concomitant drugs*	Yes	70	26.6
	No	193	73.4

Adherence to Antiretroviral Therapy in Turkey: Results from the ACTHIV-IST Study Group

MPR median±SD, range of value	0.99	±0.086	0.33-1
		n	%
MPR	<%95	39	14.8%
	>%95	224	85.2%
Missing Tablets			
Within Past 4 Days	Yes	27	10.3%
	No	236	89.7%
Within Past 1 Week	Yes	32	12.2%
	No	231	87.8%
Within Last Month	Yes	57	21.7%
	No	206	78.3%
Within Past 3 Months	Yes	70	26.6%
	No	193	73.4%

Adherence to Antiretroviral Therapy in Turkey: Results from the ACTHIV-IST Study Group

		Virologic Rebound				
		Virologic Rebound		Virologic Suppression		p
		n	%	n	%	
MPR (<95%)	Non-adherent	13	33.3%	26	66.7%	**0.000**
	Adherent	26	11.6%	198	88.4%	
Self-reported	Non-adherent	14	20.0%	56	80.0%	0.155
	Adherent	25	13.0%	168	87.0%	
ACTG Adherence	Non-adherent	21	17.6%	98	82.4%	0.242
	Adherent	18	12.5%	126	87.5%	

Chi-square test

Adherence to Antiretroviral Therapy in Turkey: Results from the ACTHIV-IST Study Group

- Uyumsuzluğun en önemli nedeni **unutma**
- İlaç kullanma konusunda kadınların erkeklere göre daha
- yüksek olduğu saptanmış.

AIDS RESEARCH AND HUMAN RETROVIRUSES
Volume 32, Number 1, 2016

DOI: 10.1089/aid.2015.0110

HIV-1 Transmitted Drug Resistance Mutations in Newly Diagnosed Antiretroviral-Naive Patients in Turkey

Murat Sayan,[1,2] Fatma Sargin,[3] Dilara Inan,[4] Dilek Y. Sevgi,[5] Aysel K. Celikbas,[6] Kadriye Yasar,[7] Figen Kaptan,[8] Selda Kutlu,[9] Nuriye T. Fisgin,[10] Ayse Inci,[11] Nurgul Ceran,[12] Ilkay Karaoglan,[13] Atahan Cagatay,[14] Mustafa K. Celen,[15] Suda T. Koruk,[16] Bahadir Ceylan,[17] Taner Yildirmak,[18] Halis Akalın,[19] Volkan Korten,[20] and Ayse Willke[21]

HIV-1 Transmitted Drug Resistance Mutations in Newly Diagnosed Antiretroviral-Naive Patients in Turkey

Amaç: Yeni tanı HIV pozitif hastalarda nakledilen ilaç direnç mutasyon prevalansını saptamak

Yöntem

- Çok merkezli bir kohort çalışması (21 şehir)
- Mart 2010- Mart 2015 (5 yıllık süre)
- 1306 HIV (+) tedavi başlanmamış naive hasta

HIV-1 Transmitted Drug Resistance Mutations in Newly Diagnosed Antiretroviral-Naive Patients in Turkey

Bulgular

- Erkek : % 88 (1151), kadın : % 12 (155)
- Yaş ortanca : 36 yıl
- CD4 sayısı : 361 mm^3 / (4-1351)
- HIV RNA ortanca : 2.59 x 10^6 kopya /ml
- HIV-1 subtip grup B : %68 (885), grup B dışı : %10 (136), dolaşan rekombinat form (CRF): % 22 (285)

HIV-1 Transmitted Drug Resistance Mutations in Newly Diagnosed Antiretroviral-Naive Patients in Turkey

TABLE 2. PRIMARY DRUG RESISTANCE MUTATIONS IN NEWLY DIAGNOSED HIV-1-INFECTED PATIENTS IN TURKEY (BETWEEN 2010 AND 2015, N=1,306)

Drug class	*Drug resistance mutation*[a]	n[b]	%
NRTI	K65R, M184V	8	0.6
TAM1	M41L, L210W, T215Y	97	7.4
TAM2	D67N, K70R, K219E/Q/N/R, T215F, T215C/D/S	52	3.9
TAM1 + TAM2	M41L + K219N, M41L + T215C/D/S	10	0.7
		107	8.1
NNRTI	L100I, K101E/P, K103N/S, V179F, Y188H/L/M, Y181I/C, G190A/E/S	44	3.3
PI	M46L, I50V, I54V, Q58E, L76V, V82A/C/L/T, N83D, I84V, L90M	30	2.3
Total		133	10.1

[a]Subtype of HIV-1 is not a variable in the identification of drug resistance mutation.
[b]The number of *n* consisted of each mutation detected patient.
NRTI, nucleoside reverse transcriptase inhibitors; NNRTI, nonnucleoside reverse transcriptase inhibitors; PI, protease inhibitors; TAM, thymidine analogue-associated mutation.

HIV-1 Transmitted Drug Resistance Mutations in Newly Diagnosed Antiretroviral-Naive Patients in Turkey

Sonuç:

- Türkiye'de tedavi almamış HIV pozitif hastalarda ilk kez TAM1-TAM2 mutasyonu saptanmış

Taylor & Francis
Taylor & Francis Group

HIV Clinical Trials

ISSN: 1528-4336 (Print) 1945-5771 (Online) Journal homepage: http://www.tandfonline.com/loi/yhct20

Integrase Strand Transfer Inhibitors (INSTIs) Resistance Mutations in HIV-1 Infected Turkish Patients

M. Sayan, A. Gündüz, G. Ersöz, A. İnan, A. Deveci, G. Özgür, F. Sargın, G. Karagöz, A. İnci, D. İnan, A Ülçay, İ. Karaoğlan, S. Kaya, S.S. Kutlu, K. Süer, A. Çağatay & H. Akalın

To cite this article: M. Sayan, A. Gündüz, G. Ersöz, A. İnan, A. Deveci, G. Özgür, F. Sargın, G. Karagöz, A. İnci, D. İnan, A Ülçay, İ. Karaoğlan, S. Kaya, S.S. Kutlu, K. Süer, A. Çağatay & H. Akalın (2016): Integrase Strand Transfer Inhibitors (INSTIs) Resistance Mutations in HIV-1 Infected Turkish Patients, HIV Clinical Trials, DOI: 10.1080/15284336.2016.1153303

HIV Clinical Trials

ISSN: 1528-4336 (Print) 1945-5771 (Online) Journal homepage: http://www.tandfonline.com/loi/yhct20

Integrase Strand Transfer Inhibitors (INSTIs) Resistance Mutations in HIV-1 Infected Turkish Patients

- Türkiye'de ıntegraz inhibitör direnç mutasyonları hakkında henüz veri yok
- İlk kez çalışılan bir konu
- Türkiye'den yapılan iki farklı çalışmada ilaç direnç bulaşma yaygınlığı 2013'de %6.2 iken 2016'daki % 10.1 olarak bildirilmiş.

HIV Clinical Trials

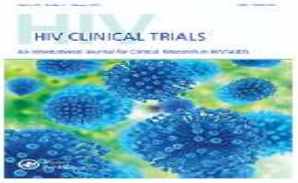
Taylor & Francis

ISSN: 1528-4336 (Print) 1945-5771 (Online) Journal homepage: http://www.tandfonline.com/loi/yhct20

Integrase Strand Transfer Inhibitors (INSTIs) Resistance Mutations in HIV-1 Infected Turkish Patients

Amaç: Türk hastalarında integraz inhibitör direnç mutasyonlarının prevalansı ve direnç testinin etkinliğini değerlendirmek

Yöntem: Nisan 2013 - Nisan 2015 arasında 169 HIV-1 ile infekte hastalar değerlendirilmiş. HIV-1 pol genin reverse transkriptaz, proteaz ve integraz bölgelerinin baz sekansları kullanılmış


HIV Clinical Trials

ISSN: 1528-4336 (Print) 1945-5771 (Online) Journal homepage: http://www.tandfonline.com/loi/yhct20

Integrase Strand Transfer Inhibitors (INSTIs) Resistance Mutations in HIV-1 Infected Turkish Patients

Yöntem

- Nisan 2013 - Nisan 2015 arasında 169 HIV-1 ile infekte hasta (78 naive, 91 ART tedavi almaktadır)
- www.hivfrenchresistance.org (mutasyon analizi algoritma)
- http://coreceptor.bioinf.mpi-inf.mpg.de (HIV-1 alt tipleri)

Table 1 Clinical and laboratory characteristics of the patients studied

Characteristic	Antiretroviral naive	Antiretroviral experienced
Patient, no.	78	91
Gender, M/F (%)	71/7 (91%/9%)	80/11 (88%/12%)
Age, median years (range)	38 (23–61)	38.4 (2.5–66)
$CD4^+$ T-cell count, median mm^3 (range)	236 (6–626)	216 (3–884)
HIV-1 RNA load, median, copies/ml (range)	4.95E+5 (3.06E+2–3.33E+6)	1.08E+6 (1.48E+2–1.57E+7)
Acquisition route, n (%)		
Heterosexual contact	52 (67%)	62 (68%)
MSM	24 (31%)	20 (22%)
Bisexuel contact	2 (2%)	4 (5%)
Blood transfusion	–	2 (2%)
Dental surgery	–	1 (1%)
Vertical transmission	–	2 (2%)
HIV-1 subtip, n (%)		
Subtype B	48 (62%)	55 (60)
Non-subtype B	20 (26%)	17 (19)
A1	11 (14%)	5 (6%)
C	2 (3%)	3 (3%)
D	1 (1%)	1 (1%)
F1	5 (7%)	6 (7%)
G	1 (1%)	2 (2%)
Circulating recombinant form CRF01_AE	10 (13%)	19 (21%)
CRF02_AG	4 (5%)	12 (13%)
CRF03_AB	4 (5%)	4 (5%)
CRF07_BC	–	1 (1%)
CRF06_cpx	–	1 (1%)
CRF13_cpx	2 (3%)	–
	–	1 (1%)
Coinfection status, n (%)		

HIV Clinical Trials

ISSN: 1528-4336 (Print) 1945-5771 (Online) Journal homepage: http://www.tandfonline.com/loi/yhct20

Integrase Strand Transfer Inhibitors (INSTIs) Resistance Mutations in HIV-1 Infected Turkish Patients

Table 2 Integrase strand transfer inhibitors (INSTIs) resistance analysis in Turkish patients infected with HIV-1

	Resistance mutation pattern					
Drug class	Antiretroviral naïve, (n = 78)	n	%	Antiretroviral experienced, (n = 91)	n	%
INI	-	-	-	INSTI – naive, (n = 89)		
				F121Y, Q148R, E157Q	4	4.4
				INSTI – experienced, (n = 2)		
				Y143R, E157Q	2	2.2
				Total	6	6.6

HIV Clinical Trials

ISSN: 1528-4336 (Print) 1945-5771 (Online) Journal homepage: http://www.tandfonline.com/loi/yhct20

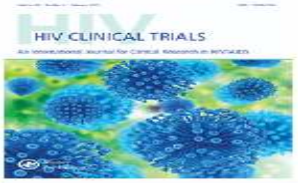
Integrase Strand Transfer Inhibitors (INSTIs) Resistance Mutations in HIV-1 Infected Turkish Patients

Table 3 Resistance mutation patterns on the revers transcriptase and protease domains of HIV-1 in the patients studied

Drug class	Drug resistance mutation pattern			
	Treatment naive (n = 78)	n (%)	Antiretroviral experienced (n = 91)	n (%)
NRTI	M184V	1 (1.2)	K65R, M184V ± TAM1, TAM2 or TAM1 + TAM2	39 (43)
NNRTI	K103N	2 (2.5)	L100I, K101E, K103N/S, V106A/M, Y188L, Y181C, G190A/S	46 (51)
PI	M46L	2 (2.5)	L24I, M46I, I54V, L76V, V82A/T, N83D, N88D, L90M	12 (13)
Total		4 (5)*		56 (62)

NRTI; nucleoside revers transcriptase inhibitors, NNRTI; non- nucleoside revers transcriptase inhibitors, PI; protease inhibitors, ARV; antiretroviral, TAM; thymidine analogue - associated mutation, TAM1; M41L, L210W, T215Y, TAM2; D67N, K70R, K219E/Q/N/R, T215F, T215C/D/S, TAM1 + TAM2; M41L + K219N, M41L + T215C/D/S.

*One patient had M184V + K103N patterns.


HIV Clinical Trials

ISSN: 1528-4336 (Print) 1945-5771 (Online) Journal homepage: http://www.tandfonline.com/loi/yhct20

Integrase Strand Transfer Inhibitors (INSTIs) Resistance Mutations in HIV-1 Infected Turkish Patients

- HIV-1 naive hastalara INSTI direnç mutasyon testi yapmaya gerek yok
- Tedavi alan hastalarda INSTI direnç mutasyon testi yapılması gerektiği vurgulanıyor.
- E92Q, Y143H, Q148H ve E157Q (% 0 -% 0,3)

THE EUROPEAN JOURNAL OF PSYCHIATRY

www.elsevier.es/ejpsy

ORIGINAL ARTICLE

Self-stigma, depression, and anxiety levels of people living with HIV in Turkey

O.F. Demirel[a,*], P.Y. Mayda[b], N. Yıldız[a], H. Sağlam[c], B.T. Koçak[d], Z. Habip[e], M.T. Kadak[f], İ. Balcıoğlu[a], B. Kocazeybek[b]

[a] *Department of Psychiatry, Cerrahpaşa Faculty of Medicine, İstanbul University, Istanbul*
[b] *Department of Microbiology, Cerrahpaşa Faculty of Medicine, İstanbul University, Istanbul*
[c] *Cerrahpaşa Faculty of Medicine, İstanbul University, Istanbul*
[d] *Erenköy Psychiatry Research Hospital, Istanbul*
[e] *Fatsa State Hospital, Department of Microbiology, Ordu*
[f] *Department of Child and Adolescent Psychiatry, Cerrahpaşa Faculty of Medicine, Istanbul University, Istanbul*

Received 6 November 2017; accepted 14 March 2018

ORIGINAL ARTICLE

Self-stigma, depression, and anxiety levels of people living with HIV in Turkey

O.F. Demirel[a,*], P.Y. Mayda[b], N. Yıldız[a], H. Sağlam[c], B.T. Koçak[d], Z. Habip[e], M.T. Kadak[f], İ. Balcıoğlu[a], B. Kocazeybek[b]

Amaç: HIV ile yaşayan kişilerin kendilerini damgalama seviyelerini, bunun anksiyete ve depresyon arasındaki ilişkini araştırmak

Yöntem: Pozitif Yaşam Derneği ile İstanbul Üniversitesi Cerrahpaşa Tıp Fakültesi Psikiyatri Bölümü

- Haziran 2015-Aralık 2016,
- > 18 yaş ve en az 6 ay süre ART tedavisi almak
- Psikolojik sorunu olmayanlar

ORIGINAL ARTICLE

Self-stigma, depression, and anxiety levels of people living with HIV in Turkey

O.F. Demirel[a,*], P.Y. Mayda[b], N. Yıldız[a], H. Sağlam[c], B.T. Koçak[d], Z. Habip[e], M.T. Kadak[f], İ. Balcıoğlu[a], B. Kocazeybek[b]

- **HIV stigma skala** (40 soru)

1-Kendini damgalama

2- İfşa endişeleri

3-Olumsuz benlik imajı

4-HIV'li kişilere karşı kamuoyu tutumları ile ilgili endişeler

- Beck Anksiyete Envanteri (BAI): Endişe, kaygı ve korku
- Beck Depresyon Envanteri (BDI): Depresif belirtiler ve depresyon şiddeti

ORIGINAL ARTICLE

Self-stigma, depression, and anxiety levels of people living with HIV in Turkey

O.F. Demirel[a,*], P.Y. Mayda[b], N. Yıldız[a], H. Sağlam[c], B.T. Koçak[d], Z. Habip[e], M.T. Kadak[f], İ. Balcıoğlu[a], B. Kocazeybek[b]

Table 1 Socio-demographic and clinical variables of people with HIV.

	n	%
Age (year)	32.98±9.4	
Gender (male/female)	58/13	81.7/18.3
Marital status (married/non-married/widowed)	10/51/10	14.1/71.8/14.1
Education (under/more than high school)	33/38	46.5/53.5
Employment (yes/no)	41/30	57.7/42.3
Smoker (yes/no)	46/25	64.8/35.2
Chronic alcohol misuse (yes/no)	14/57	19.7/80.3
Substance abuse (yes/no)	11/60	15.5/84.5
Mean age of diagnosis (year)	29.4±8.3	
Mean time between diagnosis and treatment (year)	5.44±7.6	
Mean duration of treatment (month)	33.76±52.4	
Way of transmission (sexual/unknown)	53/18	74.6/25.4
Taking antiretroviral treatment (yes/no)	66/5	93/7
Disclosure to partner (yes/no)	36/35	50.7/49.3
Taking psychotropic medication (yes/no)	10/61	14.1/85.9

ORIGINAL ARTICLE

Self-stigma, depression, and anxiety levels of people living with HIV in Turkey

O.F. Demirel[a,*], P.Y. Mayda[b], N. Yıldız[a], H. Sağlam[c], B.T. Koçak[d], Z. Habip[e], M.T. Kadak[f], İ. Balcıoğlu[a], B. Kocazeybek[b]

Table 2 HIV-stigma scale and beck depression and anxiety scale variables.

n:71	Mean ± std. deviation
Personalized stigma (HIV-stigma scale 1)	42.47 ± 11.6
Disclosure concerns (HIV-stigma scale 2)	24.32 ± 5.5
Negative self-image (HIV-stigma scale 3)	23.69 ± 7.6
Concern with public attitudes (HIV-stigma scale 4)	51.29 ± 11.1
Total HIV-stigma scale	92.48 ± 19.8
BDI score	16.9 ± 10.9
BAI score	16.57 ± 11.2

BDI: Beck Depression Inventory; BAI: Beck Anxiety Inventory.

ORIGINAL ARTICLE

Self-stigma, depression, and anxiety levels of people living with HIV in Turkey

O.F. Demirel[a,*], P.Y. Mayda[b], N. Yıldız[a], H. Sağlam[c], B.T. Koçak[d], Z. Habip[e], M.T. Kadak[f], İ. Balcıoğlu[a], B. Kocazeybek[b]

Table 3 Spearman correlations of depression, anxiety and HIV-stigma scores.

n:71	Personalized stigma (HIV-stigma scale 1)	Disclosure concerns (HIV-stigma scale 2)	Negative self-image (HIV-stigma scale 3)	Concern with public attitudes (HIV-stigma scale 4)	HIV-stigma scale total
BDI score	$r = 0.346^{*}$	$r = 0.415^{*}$	$r = 0.646^{*}$	$r = 0.412^{*}$	$r = 0.503^{*}$
	$p = 0.003$	$p < 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$
BAI score	$r = 0.426^{*}$	$r = 0.372^{*}$	$r = 0.601^{*}$	$r = 0.427^{*}$	$r = 0.498^{*}$
	$p < 0.001$	$p = 0.001$	$p < 0.001$	$p < 0.001$	$p < 0.001$

BDI: Beck Depression Inventory; BAI: Beck Anxiety Inventory.

* Correlation is significant at the 0.01 level.

ORIGINAL ARTICLE

Self-stigma, depression, and anxiety levels of people living with HIV in Turkey

O.F. Demirel[a,*], P.Y. Mayda[b], N. Yıldız[a], H. Sağlam[c], B.T. Koçak[d], Z. Habip[e], M.T. Kadak[f], İ. Balcıoğlu[a], B. Kocazeybek[b]

- İfşa etmeyen grupta depresyon, anksiyete ve HIV damgalama skorları yüksek saptanmış.
- Kendine nasıl bulaştığını bilmeyenlerde damgalama daha yüksek saptanmış
- Depresyon ve anksiyete puanları ile toplam HIV damgalama skorları ve tüm alt grup puanları ile pozitif korelasyon gösterilmiş.

ORIGINAL ARTICLE

Self-stigma, depression, and anxiety levels of people living with HIV in Turkey

O.F. Demirel[a,*], P.Y. Mayda[b], N. Yıldız[a], H. Sağlam[c], B.T. Koçak[d], Z. Habip[e], M.T. Kadak[f], İ. Balcıoğlu[a], B. Kocazeybek[b]

- % 14.1 psikiyatrik destek almaktadır
- Hastalık hakkında bilgi düzeyleri arttıkça anksiyete durumları azalabilir.
- Sorunlarla baş edebilme becerileri artırılırsa HIV'li kişilerin yaşam kalitesini artacaktır

Qual Quant
DOI 10.1007/s11135-017-0640-2

Role of awareness in controlling HIV/AIDS: a mathematical model

Bilgen Kaymakamzade[1] · Tamer Şanlıdağ[2,3] · Evren Hınçal[1] · Murat Sayan[4] · Farouk Tijjani Sa'ad[1] · Isa Abdullahi Baba[1]

2 Kasım 2017

Role of awareness in controlling HIV/AIDS: a mathematical model

Bilgen Kaymakamzade[1] · Tamer Şanlıdağ[2,3] · Evren Hınçal[1] · Murat Sayan[4] · Farouk Tijjani Sa'ad[1] · Isa Abdullahi Baba[1]

Amaç: Türkiye'de HIV / AIDS hastalığının yayılması ve kontrolü üzerine farkında olmanın etkisi

Yöntem: İki farklı matematik modeli üzerinde durulmuş

1-Toplumda duyarlı kişilerin farkındalığı

2- HIV pozitif hastaların farkındalığı

Role of awareness in controlling HIV/AIDS: a mathematical model

Bilgen Kaymakamzade[1] · Tamer Şanlıdağ[2,3] · Evren Hınçal[1] · Murat Sayan[4] · Farouk Tijjani Sa'ad[1] · Isa Abdullahi Baba[1]

- Bu matematik modelinde farkındalık arttığı zaman HIV infekte yada AIDS'li hasta sayısı azalacağı saptanmış.
- Farkındalık artması içinde eğitim programları yapılması gerekliliği vurgulanmış
- Okullarda müfredatlara konulması
- Ebeveynler; çocukların cinsellik konusunda sosyalleşme süreçlerinin bir parçası olmalı

TEŞEKKÜR EDERİM