The History of HIV/AIDS in the United States: Then and Now

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May 31, 2007
Pneumocystis Pneumonia — Los Angeles

In the period October 1980-May 1981, 5 young men, all active homosexuals, were treated for biopsy-confirmed Pneumocystis carinii pneumonia at 3 different hospitals in Los Angeles, California. Two of the patients died. All 5 patients had laboratory-confirmed previous or current cytomegalovirus (CMV) infection and candidal mucosal infection. Case reports of these patients follow.
OUR CHILDREN WANT GOOD GRADES NOT AIDS THEY HAVE RIGHTS TO
Play Safely.

L.A.CARES
...like a mother.

For more information about playing safely, call the GLCSC Health Services Clinic at 213/464-7400 or The AIDS Project/Los Angeles at 800/922-AIDS
Ohne? Ohne mich.
BREAK THE SILENCE

XIII INTERNATIONAL AIDS CONFERENCE
DURBAN - SOUTH AFRICA - 9-14 JULY 2000
HIV/AIDS Milestones (I)

- June 5, 1981: CDC Reports PCP in 5 previously healthy men
- July 1982: New syndrome named AIDS
- May 1983: French isolate LAV
- 1984: Americans isolate HTLV-III
- March/1985: FDA licenses first HIV antibody screening test
- May 1986: Virus named changed to HIV
HIV/AIDS Milestones (II)

- Mar. 1987: FDA approves AZT
- Aug. 1987: 1st U.S. clinical trial of an HIV vaccine
- 1990: Americans with Disabilities Act enacted
- Aug. 1990: Ryan White Care Act signed into law
- 1991: FOX, first national broadcast of a condom ad
- Feb. 1994: AZT shown to decrease perinatal HIV transmission
HIV/AIDS Milestones (III)

- 1995: Plasma viral load test receives FDA approval
- Oct. 1995: 500,000 persons in U.S. reported with AIDS (cum.)
- Dec. 1995: 1st PI (saquinavir) approved
- 1996: Results of HAART reported, ↓ AIDS deaths
- 1999: Origin of HIV-1 traced back to a chimpanzee retrovirus
- 2003: 1st fusion inhibitor approved
Proportion of AIDS Cases among Adults and Adolescents, by Transmission Category and Year of Diagnosis, 1985–2005—United States and Dependent Areas

Note: Data have been adjusted for reporting delays and cases without risk factor information were proportionally redistributed.

* Heterosexual contact with a person known to have or to be at high risk for HIV infection.
Estimated Number of Adults and Adolescents Living with AIDS, by Sex, 1993–2005—United States and Dependent Areas

Note. Data have been adjusted for reporting delays.
Proportion of AIDS Cases among Adults and Adolescents, by Race/Ethnicity and Year of Diagnosis 1985–2005—United States and Dependent Areas

- White, not Hispanic
- Black, not Hispanic
- Hispanic
- Asian/Pacific Islander
- American Indian/Alaska Native

Note: Data have been adjusted for reporting delays.
Estimated Number of Perinatally Acquired AIDS Cases, by Year of Diagnosis, 1985-2003—United States

Note: Data adjusted for reporting delays and for estimated proportional redistribution of cases in persons initially reported without an identified risk factor.
AIDS Cases, Deaths, and Persons Living with AIDS, 1985-2004, United States

Note. Data have been adjusted for reporting delays.
HIV/AIDS

Increased Longevity of HIV infected patients secondary to HAART

= Emerging Importance of Other Comorbidities
Consequences of Improved Long -Term Management of HIV Infection
(Palella et al. JAIDS 2006; 43(1): 27-34)

• Improved viral suppression and immunological status

• Prolonged disease-free survival

• Decreased hospitalization rates

• Increased focus on HAART treatment side effects: lipoatrophy, lipoaccumulations, insulin resistance, hyperlipidemia, cardiovascular disease, etc.

• Increasing awareness of need to provide treatment for chronic HBV and HCV coinfections

• Shift in causes of death among PLWAs in HAART era
(Palella et al. JAIDS 2006; 43(1): 27-34)

• Observ. cohort, n = 6945, 12 clinics/10 cities

• 80% M; 30% AA; 57% MSM; 23% Hetero.; 14% IDU

• 702 deaths during period of observation

• ↓ Death rate 1996 (7.0/100 person yrs.) vs. 2004 (1.3/100 py)

• ↓ Deaths due to AIDS defining illnesses: 3.79 (’96) to 0.32 (‘04)/100 py

• Proportional ↑ in deaths due to sepsis, GI, hepatic, renal disease, and non-AIDS malignancies
Americans’ Perception that HIV/AIDS is the most urgent Health Problem in the U.S., 1995 – 2006*

*Kaiser Family Foundation survey: Nationally representative telephone survey, ≥18yrs.
“HIV/AIDS is the “most urgent” health problem facing the U.S.”*

- 17% of the sample agreed with this statement
  Of all African-Americans surveyed, 39% agreed
  Of all Latinos surveyed, 23% agreed
  Of all Whites surveyed, 13% agreed

* Kaiser Family Foundation Survey, 2517 respondents, Spring 2006
Changes in the HIV Prevention Environment

- Perception that HIV is no longer a major threat
- Belief that reduced viral load = non-infectiousness
- Difficulty maintaining safer sex
- Many young never personally affected by HIV
- Unequal access to prevention services for racial/ethnic minorities
Prevalence of Treatment
Optimism Risk Behavior Among MSM, 2000-2001*
(Sullivan et al. AIDS Behav 2007; 11: 123 -129)

• 288/1477 (15%) of HIV (-) MSM reported optimism-related risk (sex/drugs) behavior

• MSM who reported optimism-related risk behavior were more likely to be:
  * African-American (OR 1.8)
  * Hispanic (OR 1.9)
  * Have educational attainment of HS or less (OR 1.8)

* behavioral surveys of MSM conducted in 27 U.S. cities
Continued Need for HIV Education in the U.S.*, Spring 2006

• In March 2006, percent of Americans who believe:
  
  • Having another STD does not increase one’s risk for getting HIV: 56%
  
  • A pregnant women cannot reduce the risk of transmitting HIV to her baby by taking ARV drugs: 55%
  
  • HIV can be transmitted through kissing: 37%
  
  • HIV can be transmitted through sharing a drinking glass: 22%

*Kaiser Family Foundation, telephone survey, national representative sample of 2517 respondents
Estimating Sexual Transmission of HIV from Persons Aware and Unaware of HIV Infection
(Marks, Crepaz & Janssen; AIDS 2006, 20:1447-1450)

“Thus, of the approximately 40,000 new HIV infections each year in the U.S., 32,000 are sexual transmissions….the HIV positive unaware group contributes disproportionately to these new infections…the transmission rate is 3.5 times higher in the unaware group” (p.1449).
The Economic Burden of HIV in the United States*
(Hutchinson et al. JAIDS 2006;43:451-457)

$36.4 Billion: estimated cost of new HIV infections, 2002
- $6.7 Billion: direct medical costs
- $29.7 Billion: productivity losses

* Based on estimate of 40,000 new HIV infections, 56% with CD4<200
HIV/AIDS in the 21st Century

• Increased attention to prevention issues for HIV seropositives

• Increased emphasis on early HIV diagnosis

• Issues of emerging drug resistance

• Continued emphasis on vaccine and microbicide research

• Continued issues related to prevention capacity
“Past experience, if not forgotten, is a guide to the future”.

Chinese Proverb