

SCHOOL OF PUBLIC HEALTH
UNIVERSITY OF CALIFORNIA, BERKELEY

PH 253C AN OVERVIEW OF THE HIV/AIDS EPIDEMIC

Fall Semester, 2004
Tuesday and Thursday, 9:30 - 11 am
2312 Tolman Hall

3 units

Instructor:
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The spread of HIV represents the biggest failure in the history of public health. In some African countries between half and two thirds of all adults over age 15 are going to die of AIDS. This course looks frankly at an epidemic that was first defined in San Francisco and which continues to spread exponentially in many parts of the world. The course is divided into three parts: 1) What do we know about the transmission, natural history of the disease and spread of the epidemic? 2) What do we need to do to control the epidemic and to care for those infected? 3) What do you, the students, think of the impact, control, politics, ethics, policy, and human aspects of this disease?

AIDS is a multicultural, multidisciplinary topic where everyone can learn and everyone can contribute. This course takes a multidisciplinary focus and it is recommended for public health, public policy, social welfare, law and medical students. The course gives considerable weight to the international aspects of the epidemic. The focus will be prevention and the social and political factors that divert attention away from practical steps that need to be taken to prevent the spread of HIV. The course includes outside experts. Most sessions will consist of a one hour lecture and a half hour discussion and student participation is encouraged.

Learning objectives

To understand the transmission and natural history of HIV infection; understand options for interrupting the transmission of HIV; review political, financial and logistic barriers to prevention and treatment.

Grading

1. Class participation: 15%
2. Essay One: The UN Secretary General has called for a multi-billion fund for AIDS in Africa. What problems and opportunities do you see in administering this fund? No more than 6 double-spaced pages. Due 10/21. 20%
3. Presentation: Depending upon the size of the class you will present individually or as teams. Students will select a topic by 10/28 and presentations will be scheduled in the second half of the course. 30%
4. Essay Two: Topic to be selected by students. Topics may deal with the presentation subject, or a different subject. No more than 5-7 double-spaced pages. Due 11/18. 35%

Electronic Sources

A course Blackboard site will be created and my Powerpoints and those of guest lecturers and student presentation will be posted on it. We will also share web addresses. Readings are important and we will discuss in the first class whether you want a Reader (which I have provided in prior years) or to use electronic sources for class readings and to discover your own material.

Flexibility

HIV/AIDS is a huge, fascinating and sad field. I have left gaps in the schedule so the class can help decide if you want on additional topics covered or to bring in extra speakers. We also need flexibility to accommodate student presentations – and they in turn depend on how many join the class.

COURSE OUTLINE

1. 8/31 **Introduction: Understand the course, get to know each other, web sites.**

WHAT DO WE KNOW ABOUT HIV/AIDS?

2. 9/02 **The scale and shape of the HIV Epidemic.**

PM Wortley, PL Fleming. AIDS in women in the United States, Recent Trends. *JAMA*, 1997; 278(11): 911-916

S Deren, M Shedlin, M Beardsley. HIV-related concerns and behaviors among Hispanic women. *AIDS Education and Prevention*, 1996; 8(4): 335-342

3. 9/07 **Trends in global HIV/AIDS.** (Chin)

J Chin. Scenarios for the AIDS epidemic in Asia. *Asia-Pacific Population Research Abstracts*, No.2, Feb 1995

4. 9/09 **Other 20th century epidemics.** (Winkelstein)

5. 9/14 **HIV transmission and human sexual behavior.**

AM Johnson, J. Wadsworth, K Wellings, S Bradshaw, J Field. Sexual lifestyles and HIV risk. *Nature*, 1992; 360:410-412

RT Michael, JH Gagnon, EOP Laumann, G Kolata. Sex in America: A definitive survey. Little Brown, New York (selected pages)

RT Michael, J Wadsworth, J Feinleib, AM Johnson, EO Laumann, K Wellings. Private sexual behavior, public opinion, and public health policy related to sexually transmitted diseases: A US-British comparison. *American Journal of Public Health*, 1998; 88(5): 749-754

M Potts. The nature of love, in *Ethics in Reproductive Medicine*, 1991, pages 87-103

6. 9/16 **San Francisco Men's Health Cohort.** (Winkelstein)

W. Winkelstein, et al. The San Francisco men's health study: III Reduction in human immunodeficiency virus transmission among homosexual/bisexual men, 1982-86. *American Journal of Public Health*, 1987; 76(9): 685-689

7. 9/21 **The virus.** (Donovan)

8. 9/23 **Natural history of HIV/AIDS.** (Donovan)

HW Sheppard, MS Ascher. The natural history and pathogenesis of HIV infection. *Annu. Rev. Microbiol*, 1992; 46: 533-564

9. 9/28 **STDs, condoms and HIV.**

L Weinhardt, M Carey, B Johnson, N Bickham. Effects of HIV counseling and testing on sexual risk behavior: a meta-analytic review of published research, 1985-1997. *American Journal of Public Health*, 1999; 89 (9): 1397-1405

The National Institute of Mental Health (NIMH) Multisite Prevention Group. The NIMH multisite HIV prevention trial: reducing HIV sexual risk behavior. *Science*, 1998; 280:1889-1890

Population Reports. Controlling sexually transmitted diseases. Issues in World Health, Series L, No. 9, 1993

H Grosskurth, et al. Impact of improved treatment of sexually transmitted diseases on HIV infection in rural Tanzania: randomised controlled trial. *The Lancet*, 1995; 346: 530-536

S Daley. Screening girls for abstinence in South Africa, *New York Times*, 17 August, 1999

10. 9/30 **New insights: male circumcision and lemons. / AIDS in Nigeria.** (Daniel Perlman)

D Halperin, R Bailey. Male circumcision and HIV infection: 10 years and counting. *The Lancet*, 1999; 354:1813-1815

USAID office of HIV/AIDS, Male circumcision: current epidemiological and field evidence. Conference report, September 18-19, 2002 (pages v-vii)

11. 10/05 **Therapies and vaccines.**

JG Bartlett, RD Moore. Improving HIV therapy. *Scientific American*, July 1998: 84-87

D Richman. How drug resistance arises. *Scientific American*, July 1998: 88-89

J Cohen. Cheap treatment cuts HIV transmission. *Science*, 1999; 283: 916-917

D Baltimore, C Heilman. HIV vaccines: prospects and challenges. *Scientific American*, 1998: 98-103

M Potts. The urgent need for a vaginal microbicide in the prevention of HIV transmission. *American Journal of Public Health*, 1994; 84(6): 890-891

HOW SHOULD WE CONTROL, TREAT AND RESPOND TO HIV/AIDS?

12. 10/07 **Core groups: IV drug users and commercial sex workers.**

JA Gray, GJ Dore, Y Li, S Supawikul, P Effler, JM Kaldor. HIV-1 infection among female commercial sex workers in rural Thailand. *AIDS*, 1997; 11: 89-94

JM Greene. Prevalence and correlates of survival sex among runaway and homeless youth. *American Journal of Public Health*, 1999; 89(9): 1406-1409

DT Halperin. Dry sex practices and HIV infection in the Dominican Republic and Haiti. *Sex Transm Inf*, 1999; 75: 445-446

Public Health Service Budget Office, IHPS, UCSF. Federal HIV/AIDS funding by function, October 1993 (selected pages)

R Perez-Pena. Tracking a deadly secret. *New York Times*, November 13, 1997

13. 10/12 **Is there an AIDS/industrial complex?**

A Attaran, J Sachs. Defining and refining international donor support for combating the AIDS pandemic. *The Lancet*, 2001; 357: 57-61

D Tarantola, J Mann, M Viravaidya, R Moodie, S Sundararaman. Governments of Asia and the Pacific responding to the HIV/AIDS pandemic. *AIDS*, 1994; 8(Sup 2): S183-S192.

EC Green. The impact of religious organizations in promoting HIV/AIDS prevention. CCIH in brief,

14. 10/14 **Can we afford retroviral therapies in Africa?** (class discussion)
- S Moses, et al. Controlling HIV in Africa: effectiveness and cost of an intervention in a high-frequency STD transmitter core group. *AIDS*, 1991; 5: 407-411
- SD Pinkerton, et al. Cost-effectiveness of a community-level HIV risk reduction intervention. *American Journal of Public Health*, 1998; 88(8): 1239-1242.
- D Cohen. Escalating costs due to delaying the start of an effective HIV programme, from "The Economic Impact of AIDS", 1992 (selected graphic)
- J Ng'weshemi, et al. HIV impact on mother and child mortality in rural Tanzania. *J Acquir Immune Defic Syndr*. 2003 Jul 1;33(3):393-404
15. 10/19 **A Local Response: AIDS and the gay life style in San Francisco.** (to be decided)
- RJ Wolitski, et al. Are we headed for a resurgence of the HIV epidemic among men who have sex with men? *American Journal of Public Health*, 2001; 91(6): 883-888
16. 10/21 **International funding: opportunities, constraints and problems** (Kate Blumenreich)
/ ESSAY ONE DUE
17. 10/26 **Student presentations.**
18. 10/28 **Another perspective.** (Duesberg)
19. 11/02 **Where are we?** / Presentation topics selected.
20. 11/04 **Subject to be chosen by class.**
21. 11/09 **Subject to be chosen by class. Student presentations.**
- 11/11 Veterans Day Holiday
22. 11/16 **Subject to be chosen by class.**

WHAT DO YOU THINK?

23. 11/18 **Student Presentations / ESSAY TWO DUE.**
24. 11/23 **Student Presentations.**
- 11/25 Thanksgiving Holiday
25. 11/30 **Student Presentations.**
26. 12/02 **Student Presentations.**
27. 12/07 **Student presentations / Review of Essays.**
28. 12/09 **Conclusions. Wrap up.**

Relevant Journals:

AIDS, AIDS and Public Policy Journal, The Lancet, Morbidity and Mortality Weekly Report, Journal of Acquired Immune Deficiency Syndromes and Human Retrovirology, Science.

8/25/04