

The role of evidence-based medicine and public health in confronting the HIV/AIDS pandemic

XIV Cochrane Colloquium
25 October 2006
Dublin, Ireland

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HIV/AIDS is a large and growing epidemic

- Global burden of HIV is already large
 - ✓ Fourth leading cause of death worldwide (4.8%)
- *Global Burden of Disease* project's baseline scenario envisions HIV/AIDS continuing to grow through 2030, even assuming 80% ART coverage by 2012
 - ✓ Third leading cause of death worldwide (8.7%)
 - ✓ Leading cause of disability adjusted life years (10.3%)

HIV/AIDS in 2005

Adults and children living with HIV/AIDS

38.6 million

Adults and children newly infected with HIV

4.1 million

Adult and childhood deaths due to HIV/AIDS

2.8 million

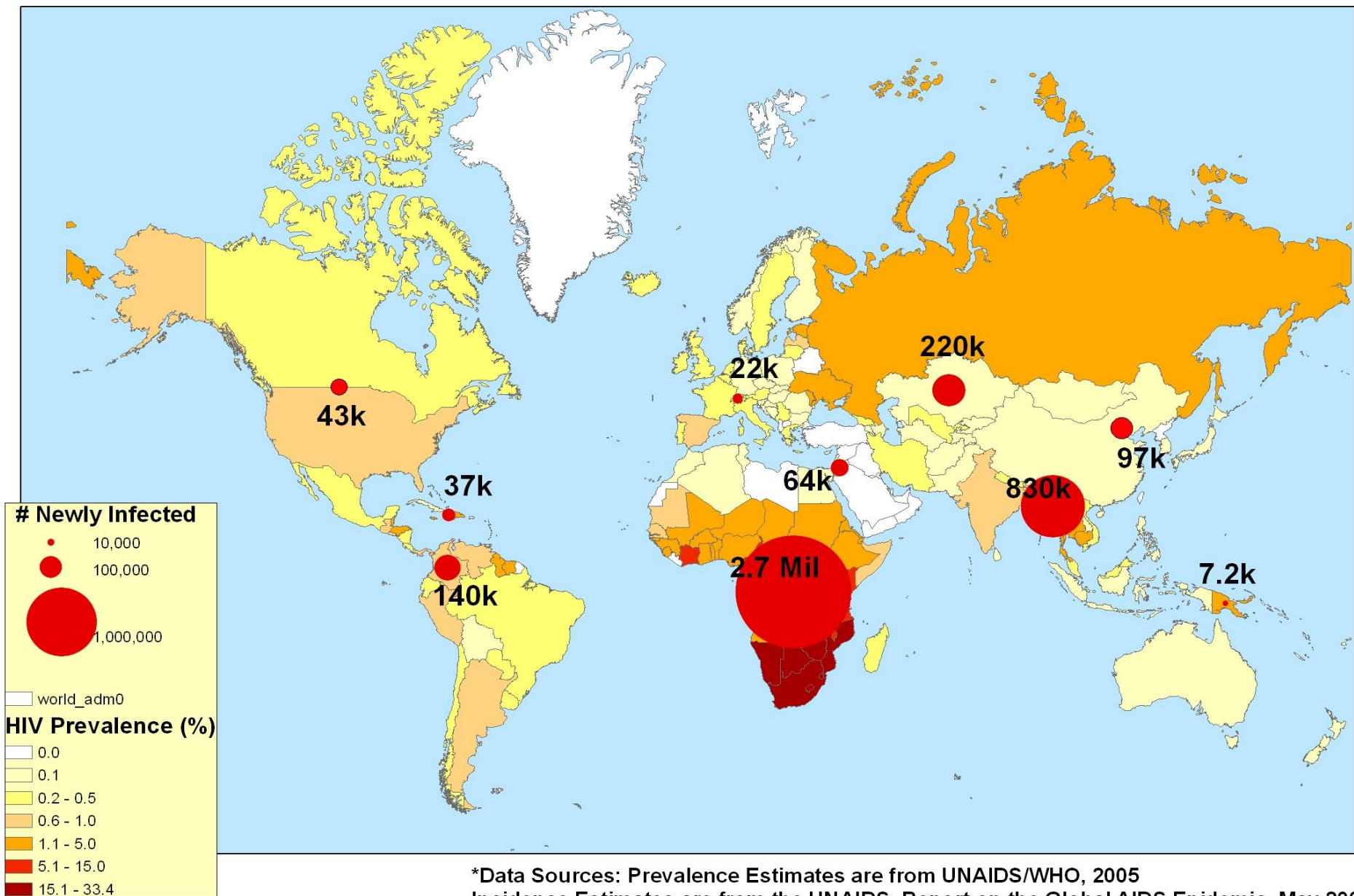
HIV prevalence among adults 15-49

1.0%

WHO, UNAIDS. *2006 Report on the global AIDS epidemic.*

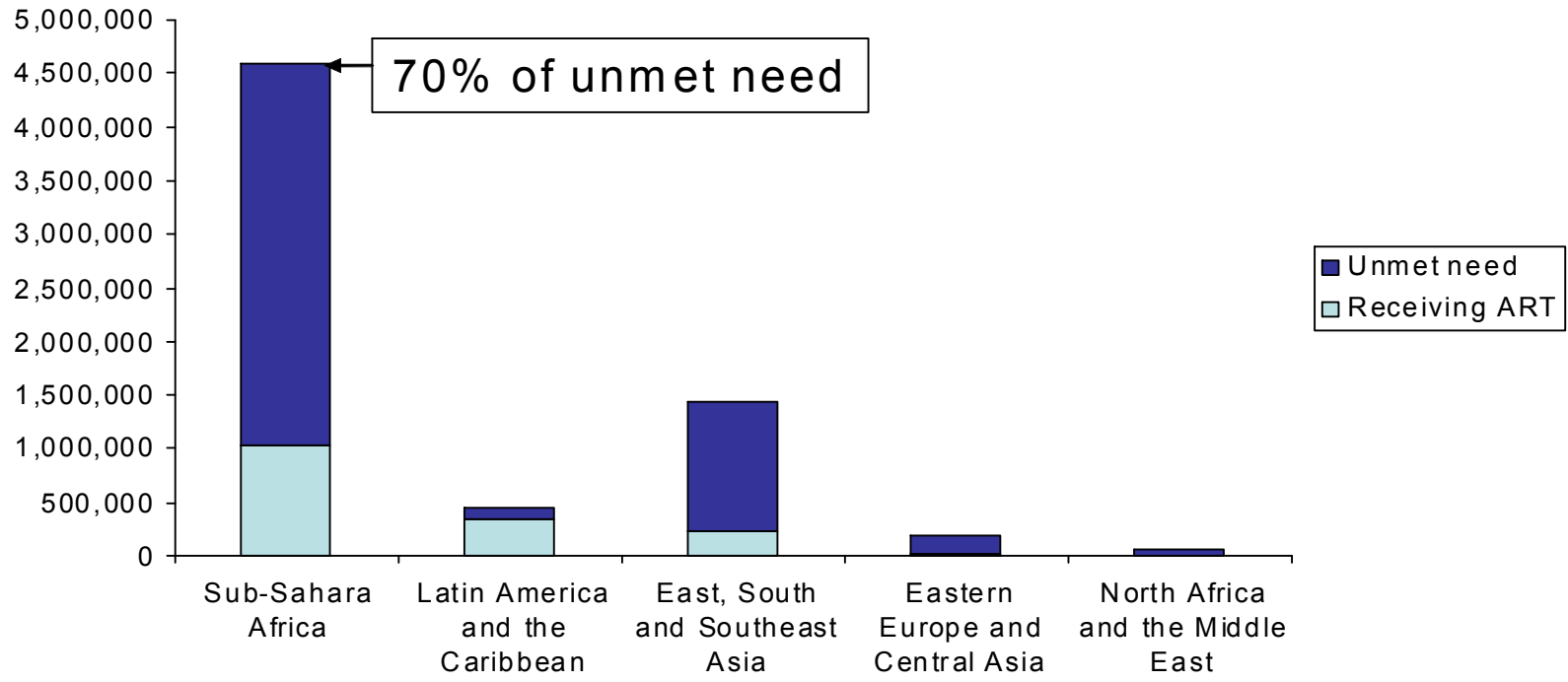
Prevalence of HIV/AIDS Among 15-49 Year Olds, 2005

Number of Newly Infected Patients by Region, 2005

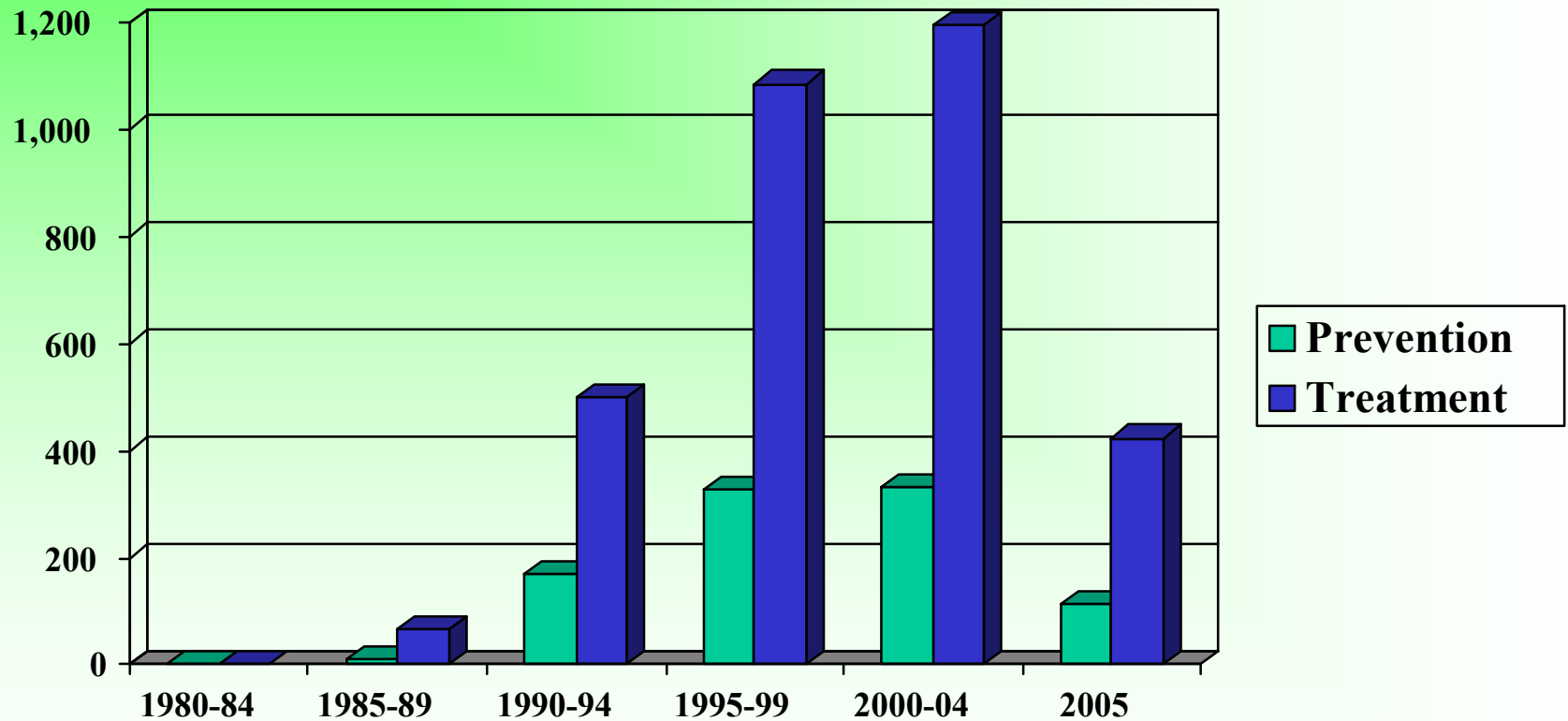


*Data Sources: Prevalence Estimates are from UNAIDS/WHO, 2005
 Incidence Estimates are from the UNAIDS, Report on the Global AIDS Epidemic, May 2006

Antiretroviral therapy global need, June 2006



Randomised controlled trials on HIV/AIDS by type, 1980-2006



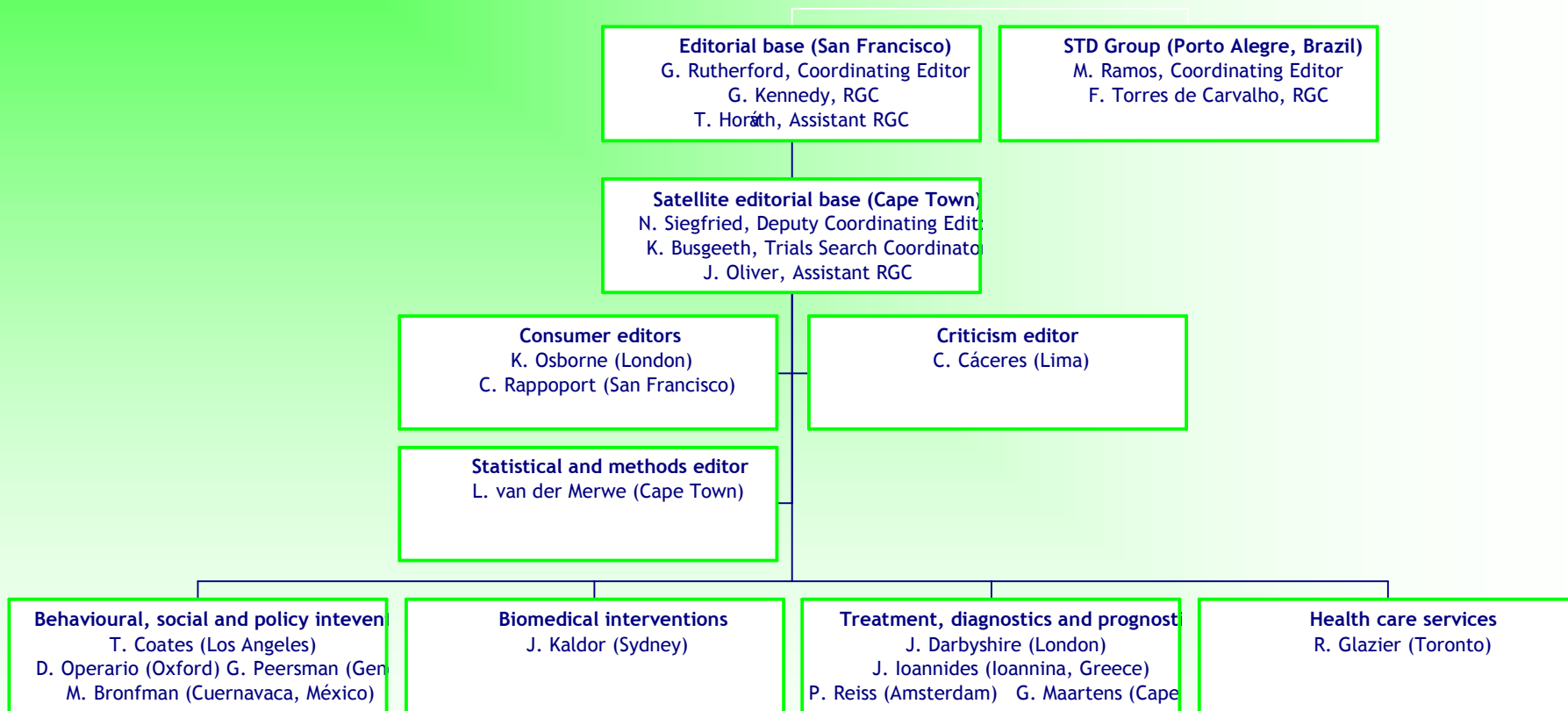
Primary and secondary prevention of new infections

- Behavioural, social and policy prevention interventions
 - ✓ Targeting individuals
 - ✓ Targeting communities at risk
 - ✓ Targeting policymakers and opinion leaders
- Biomedical interventions
 - ✓ Preventing acquisition of infection
 - ✓ Preventing transmission of infection from infected persons

Treatment and care for HIV infection and AIDS

- Treatment interventions
 - ✓ Antiretroviral therapy
 - ✓ Preventing and treating opportunistic infections and malignancies
- Health services organization and delivery
 - ✓ Complementary care and social support

How the HIV/AIDS Group is organised to do what it does



Making reviews more accessible

- Evidence assessments for guidelines development and consensus conferences
- Umbrella reviews of multiple interventions
- Prioritizing topics of most interest
 - ✓ Second-line antiretroviral therapy
 - ✓ Prevention of opportunistic infections in least-developed countries
 - ✓ Male circumcision
 - ✓ Abstinence-based interventions
 - ✓ Integration of sexual reproductive health and HIV/AIDS services
- GIS mapping of trials

Audiences for our reviews

- South Africa Department of Health
- South African Medical Research Council
- United Kingdom Medical Research Council
- United States Council on Foreign Relations and Milbank Memorial Fund
- United States Department of State - Presidential Emergency Plan for AIDS Relief
- United States Institute of Medicine
- United States Office of Minority Health
- WHO Consensus Conference on Essential Care and Prevention Interventions for People Living with HIV
- WHO Consultation on Nonoxynol-9
- WHO List of Essential Medicine
- WHO *Reproductive Health Library*

Challenges to producing reviews

- Funding, cost and time commitment
- Need for more recognition of Cochrane Collaboration and role of systematic reviews within the international HIV/AIDS community
- Vast number of new RCTs emerging - staying in front of the curve
- Variability in types of studies, methods and outcomes - mixed and non-randomised methods
- Applicability of different interventions in different sub-populations and in different epidemiologic situations