

Conducting An Evaluation of HIV/AIDS/STI Surveillance Systems in The Caribbean

A Summary

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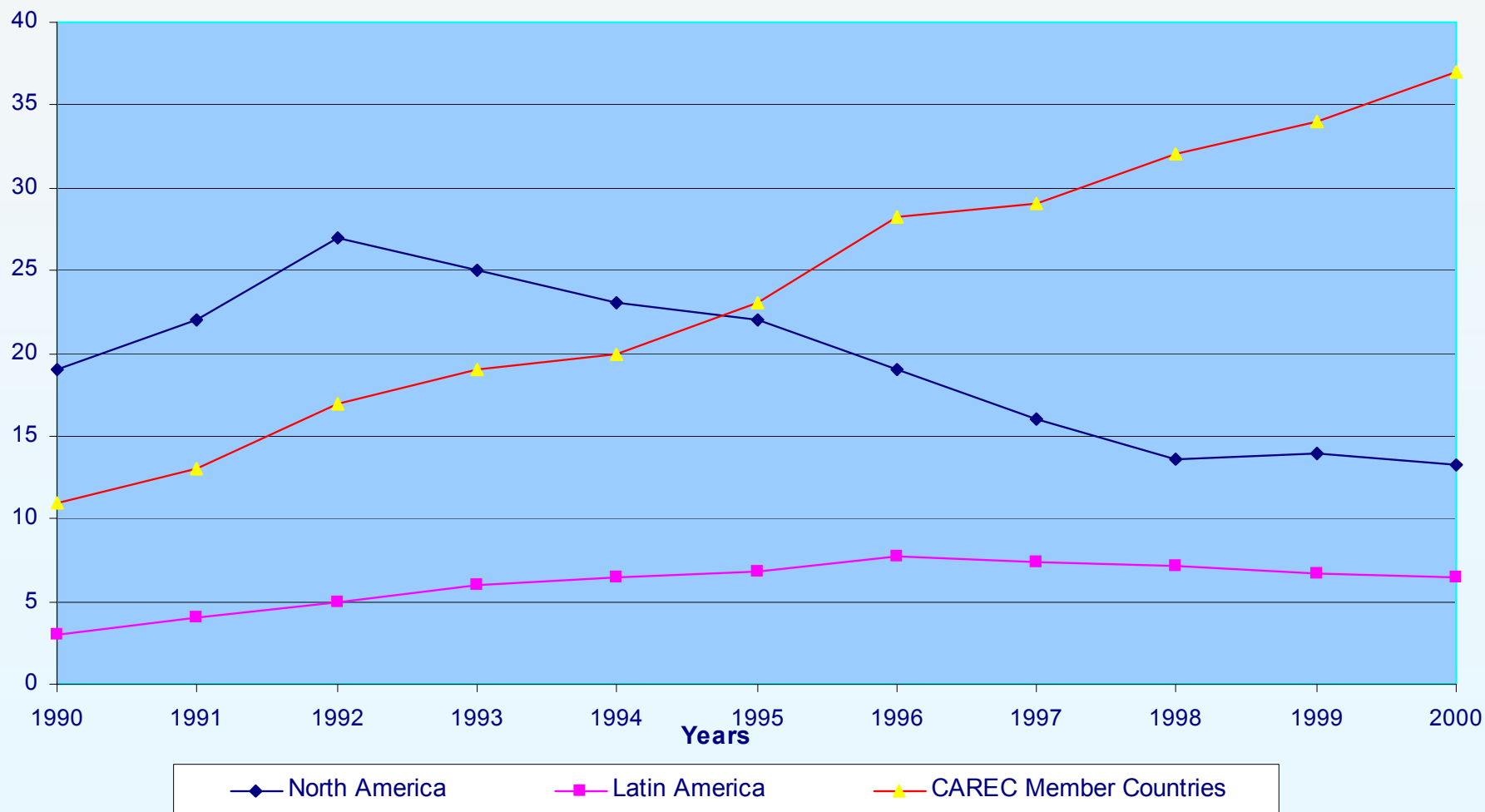


HIV/AIDS in the Caribbean : 1982-2002

THE MAGNITUDE OF THE EPIDEMIC

Source: CAREC-CDC and UNAIDS

Reported AIDS Cases : Annual Incidence per 100,000 Population and Region



Estimate of People Living with HIV/AIDS in the Caribbean in 2001

- Total approximately 475,000
- CAREC Member Countries: 91,284 (Source: CAREC & CDC)
- Dominican Republic: 130, 000 (Source: COPRESIDA-UNAIDS)
- Haiti: 250, 000 (Source: UNAIDS)
- Cuba: 3,200 (Source: UNAIDS)

Evaluation of HIV/AIDS/STI Surveillance Systems: The Caribbean Standard for Evaluation

Developed by the CAREC HIV/AIDS/STI
Multidisciplinary Surveillance Cluster
including Medical Epidemiologists, Laboratory
Scientists, Social Scientists and Public Health
Specialists

HIV/AIDS/STI Surveillance:

The Caribbean Approach and Objectives

- Use Health Promotion approach to strengthen HIV/AIDS/STI Surveillance programmes at national and regional levels.
- Support Monitoring & Evaluation of CCH2 Indicators & Objectives and other International HIV/AIDS Prevention Indicators signed of by Caribbean Decision Makers.
- Assess Trends and Status of the HIV/AIDS Epidemic at national and region levels.

CAREC's Mandate and Regional Responsibility

- Play the leadership role in upgrading & strengthening of national HIV/AIDS/STI Surveillance Systems.
- Promote and Advocate for standardization & sharing of Best Practices re HIV/AIDS/STI Surveillance, development of Sustainable and Effective HIV/AIDS/STI Surveillance Systems.
- Provide regular updated assessment of Epidemiological and Behavioural trends and status regarding the HIV/AIDS epidemic to CARICOM, national decision makers and other regional agencies.
- Publish success stories identified in terms of declining HIV/AIDS trends in individual countries.
- Participate in the evaluation of national HIV/AIDS/STI Surveillance Systems & formulate recommendations for their strengthening (Already 15 CAREC Member Countries benefited from that evaluation).

Conducting an Evaluation of HIV/AIDS/STI Surveillance Systems: The Teams

- A National Multidisciplinary Team comprising the National Epidemiologist, the National Laboratory Director and the National Health Educator or Behavioral Scientist
- &
- A Counterpart Regional Multidisciplinary Team comprising a CAREC/PAHO and/or CDC Epidemiologists or Public Health Specialists, a CAREC Laboratory Scientist and a CAREC Behavioral Scientist

Conducting an Evaluation of the HIV/AIDS/STI Surveillance Systems

- Joint teams will develop and implement Evaluation Framework with objectives, select key indicators to be used to evaluate the HIV/AIDS/STI Surveillance Systems
- Identify sources where information will be collected & methods to be used to collect the information (Health Facility surveys, National AIDS Programme Secretariat, National Epidemiology Divisions, Health Care Institutions including Laboratories & Pharmacies, Vital Statistic and Central Statistic Offices, Health Care Providers) through interviews, community & group surveys, focus groups, medical records & observation.
- The Evaluation Framework should be based on the following questionnaire and recommendations re: conduct of surveys (as indicated on the next slides)

Are National HIV/AIDS/STI Surveillance Systems Meeting National Objectives and Regional Standards?

- Understanding of sexual behaviors and risky practices driving the HIV epidemic
- Assessing national epidemiological trends over time
- Orienting public health actions towards vulnerable groups
- Measuring coverage & quality of care for PLWHA and STI patients
- Assessing impact of HIV/AIDS/STI prevention and control programs
- Planning from evidence

Conduct of a Quantitative and Qualitative Assessment of Functions & Attributes of HIV/AIDS/STI Surveillance Systems

- Source of Information
- Flow of Information
- Data Storage and Management
- Data Analysis and Dissemination
- Weekly & Quarterly Reports to CAREC
- Surveillance Team Functioning
- Standardization
- Simplicity
- Timeliness
- Flexibility
- Sustainability
- Participatory
- Acceptability
- Representativeness
- Sensitivity/specificity
- Usefulness

Conduct of a Quantitative and Qualitative Assessment of Methodologies Used for the HIV/AIDS/STI Surveillance

- Epidemiological Surveillance: reporting HIV, AIDS & STI cases & AIDS deaths, HIV/STI prevalence & anti-microbial resistance surveys.
- Behavioral Surveillance Surveys (BSS) or Surveys on Knowledge, Attitudes, Beliefs and Practices (KABP)
- Concomitant periodic BSS & seroprevalence surveys focusing on vulnerable groups conducted (i.e. young people, pregnant women, FSW, MSM)
- Periodic audit of quality of care for PLWHA & patients with STI & PMTCT

Conduct of a Quantitative and Qualitative Assessment of the Description of HIV/AIDS/STI Surveillance Systems

- Vertical versus Integrated HIV, AIDS and STI Surveillance
- Universal Case Reporting
- Sentinel Reporting
- Repeated Seroprevalence & Behavioral Surveys, etiologic & resistant patterns
- Other sampling methodologies used.
- Active versus Passive Surveillance
- Registries used for HIV/AIDS/STI cases
- Cohort studies among PLWHA and STI patients to audit quality of care & treatment provided to them

Understanding STI Conditions Under Surveillance:

Syndromes:

- Vaginal Discharge in Females
- Urethral Discharge in Males
- Genital Ulcers in Males & Females
- Neonatal Conjunctivitis.

Diseases:

- Chancroid
- Gonococcal Infections
- Bacterial Vaginosis
- Chlamydial Infections
- Herpes Simplex Virus Infections
- Syphilis (including Congenital Syphilis),
- Donovanosis
- Trichomoniasis

Meeting the Minimum Data Requirements Regarding Reporting and Assessment of Surveys Conducted for STI Surveillance

Case Reporting:

- Minimum Data Required: age, sex, residence, treatment & health care setting.
- Case Reporting: Etiologic or Syndromic basis (Urethral, Vaginal Discharge or Genital Ulcers)- Active or Passive
- Sensitivity estimates for STI

Prevalence Surveys:

- Sentinel, Cross Sectional or Special Surveys and Studies: Prevalence studies in specific groups (pregnant women, female sex workers, young people, blood donors).
- Anti-Microbial Resistance Studies

Meeting the Minimum Data Requirements Regarding Reporting and Assessment of Surveys Conducted for HIV Surveillance

HIV Case Reporting

- Minimum Data Required: age, sex, sector of employment, residence, reason for testing, route of transmission, date of diagnosis and health care setting

Point Prevalence Surveys

- Essential Groups: Pregnant women, young people, MSM, FSW, blood donors, STI and Tb patients
- Molecular Epidemiology and Genotyping

Meeting the Minimum Data Requirements for Surveillance of AIDS and AIDS Deaths

AIDS Case Reporting

- Minimum data: age, sex, residence, sector of employment, route of transmission, date of diagnosis, major and minor signs or indicator diseases

AIDS Deaths Reporting

- Minimum data: includes all information collected from AIDS cases plus cause of death: an Opportunistic Infections or HIV disease

Conduct of a Quantitative and Qualitative Assessment of Studies Regarding Audit of STI Syndromic Treatment and Special Surveys

- Audits of quality of treatment on biannual basis to assess availability of STI drugs to support Syndromic Management of STI
- Audits STI Treatment Flow Charts and their relevance
- Conduct pharmacy or community-based STI self-treatment studies
- Cross sectional prevalence studies regarding STI etiologies & resistance patterns to strengthen effectiveness of flow charts. Studies in specific groups: pregnant women, STI patients, FSW and young people i.e new army recruits, prisoners at admission

Conduct of a Quantitative and Qualitative Assessment of Studies Conducted Regarding Audit of Quality of Care among PLWHA

Institutional Readiness

- Targeted Groups: physicians, nurses, pharmacists, social workers/counselors, laboratory workers,
- Targeted Functions: recording, capacity to provide Essential Package of Care, equity, prevention of blood transmission & NCI (i.e. PEP, Universal Precautions)

PLWHA Perspectives

- Access to Essential Package of Care (EPC) as defined by CAREC
- PLWHA satisfaction with services provided and behavioural change
- Address PLWHA human rights issues at all levels (workplace family & community)

Conduct of a Quantitative and Qualitative Assessment of Sampling Methodologies Used to Conduct Care Surveys

Health Care Institutions:

Selected Health Care Institutions from different geographic areas (rural, semi-urban and urban) with different levels of health care delivering systems (primary, secondary and tertiary institutions) and NGOs involved in Institutional and home care for PLWHA.

For PLWHA:

- Retrospective study: Random sampling using national registries for HIV and AIDS cases
- Alternative sampling: Snow Ball sampling or networking sampling and the “take them all approach” during a period of time.

Care and Support for PLWHAs and Their Families

Minimum Care Package (1)

- Ensure easy access to Voluntary, Confidential Counselling and HIV Testing (VCT) and its quality (standards)
- Include prevention of Mother-to-Child-Transmission of HIV (MTCT) in ante- and post-natal care; alternatives to breastfeeding
- Counselling for safer sexual behaviour, including family planning
- Ensure skills in universal precautions (home and institutional levels)
- Monitor clinical status (clinical: symptoms of TB and other opportunistic infections, fever, weight loss, failure to thrive, cervical cancer screening and referral; regular laboratory investigations: lymphocytes count and differentials)

Minimum Care Package (2)

- Monitor mental and psychological status and provide psychosocial support for HIV positive individuals and their families
- Continuum of Care: coordination between hospitals, ambulatory clinics, home-based care providers
- Prophylaxis (Cotrimoxazole and INH) against TB, Pneumocystis carinii pneumonia, toxoplasmosis; treatment of tuberculosis (DOTS), oral and vaginal candidiasis
- Provide home-based care; enable families to care for PLWHA
- Social and financial support for orphans and widows: schooling, social rehabilitation, foster parenthood and income generation activities

Minimum Care Package (3)

- Abolition of discrimination and stigma at health institutions, community and workplace levels
- Involve PLWHA support groups: referral, solidarity, responsible sexual behaviour, advocacy and community actions
- Ensure hygiene, healthy nutrition and life style (sufficient sleep, stress reduction, stop smoking, drinking or other substance abuse)
- Ensure that people with HIV/AIDS can live and die in dignity and that their bodies are handled with respect
- Religious organizations provide spiritual counselling and care

Maximum Care Package (1)

- All of the previous plus:
- Active screening and prophylaxis: TB, Cancer of Cervix (PAP smears); Tetanus and other immunizations as needed.
Monitoring of major functions: lungs, kidneys and liver
- Monitor laboratory parameters:
 - CD4 count or alternatives, Viral Load or p24 antigen as alternative
 - Chest X-ray, B2 microglobulin, neopterin (urine and serum). Liver and kidney functions. Tuberculin skin test, PPD. Syphilis, CMV, HBV and Toxoplasma serologies. Erythrocyte sedimentation rate, complete blood count and differentials.
 - Diagnosis and treatment of Opportunistic Infections: HSV and CMV (Acyclovir, Gancyclovir), multi-drug resistant TB, atypical mycobacterial infections, systemic fungal infections, HIV associated cancers

Maximum Care Package (2)

- Treatment of cancers: Kaposi's Sarcoma, surgical or radiological, treatment of Cervical Cancer, and other cancers
- HAART incl. monitoring of lab parameters and side effects of HAART (fat metabolism, symptoms, liver, health and kidney functions)

Conduct of a Quantitative and Qualitative Assessment of HUMAN RIGHTS and ETHICS Regarding HIV/AIDS SURVEILLANCE

- Ethical principles should guide international, national, community & individual response to AIDS.
- There is a moral responsibility of the modern epidemiology
- Human Rights Principles are very relevant to HIV/AIDS
- Ethical principles should guide formulation & implementation of HIV/AIDS policies.
- Periodic surveys among vulnerable groups and & general population should address issues related to stigma and discrimination.

Conduct of a Quantitative and Qualitative Assessment of the PMTCT of HIV Programs: Using the CAREC Tool For Evaluation of PMTCT

- Assess impact of PMTCT programs
- % reduction in the MTCT of HIV (children born HIV- from HIV + mothers)
- Assess outcome of PMTCT programs
- % increase in number of pregnant women accepting VCT for PMTCT of HIV
- % decrease in number of repeaters

Conduct of a Qualitative and Quantitative Assessment of Laboratory Procedures

- Methodological & Diagnostic procedures including Quality Assurance and Quality Control Programs
- Support Provided to Epidemiological Surveys and Surveillance
- Administrative, Human Resources & Budgetary Allocations
- Ability to function as part of a national HIV/AIDS/STI Surveillance team

Quantitative and Qualitative Assessment of Behavioral Surveillance Surveys Conducted

- Periodic BSS or Knowledge, Attitudes, Beliefs and Practices (KABP) using household surveys in the general population
- Epidemiological Relevance of Behavioral Indicators used during surveys
- Periodic BSS surveys among vulnerable groups (burden and spread of the epidemic): MSM, young people, FSW and PLWHA: cluster sampling, networking or snow ball sampling or others

Quantitative and Qualitative Assessment of the use of OTHER SOURCES OF INFORMATION to Validate Surveillance Information

- Central Statistical Offices: important information source to validate AIDS deaths reported by national surveillance systems
- Vulnerable groups themselves
- Communities and their leaders
- Vital statistics
- HIV screening:
 - Among Visa & Insurance applicants
 - Pre-Employment HIV testing
- Regular HIV & STI Laboratory Reports

Publish a Consolidated Evaluation Report

- Formulate technical & managerial recommendations
- Develop a strategic plan to address immediate, intermediate and long term needs to strengthen national HIV/AIDS/STI surveillance
- Present recommendations and strategic plan to regional and national decision makers.