Gaps and Priorities in U.S. Contributions to Global Disease Challenges:
What has the U.S. done well and not as well?

HIV Prevention Programming

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July 7, 2008
IOM Working Group Meeting

Challenges

- HIV prevention planning still largely deficient after 25+ years
  - 2.5 million new infections/year, 33 million people with HIV
  - Incidence has plateaued, but prevalence may not for another 25 or more years and the number of people on treatment well after the prevalence peak
- Currently available evidence easily ignored
  - E.g. harm reduction, abstinence-only programs
- Insufficient data:
  - Epidemiology
  - Intervention/program effectiveness
  - Intervention costs/coverage
- Requires addressing sex and drugs

Major Findings

- Incontrovertible effectiveness of:
  - safe injection practices, blood screening, PMTCT, condoms (when used), circumcision (for heterosexual men), harm reduction for IDU
- Multiple examples of effective prevention of sexual transmission among key populations (e.g. MSM, FSW)
  - Common elements: multiple, reinforcing interventions ("combination prevention"); high levels of coverage (tipping point?); community involvement
- Poor data base regarding:
  - general population behavioral interventions: VCT, IEC, school education, CSM
  - costs of interventions
- No data base regarding structural interventions

U.S. Contribution

PROs

- U.S. has contributed enormously to HIV treatment and prevention through PEPFAR & Global Fund
- U.S. pillar of R&D for treatment, vaccines, microbicides

CONs

- "Emergency" response not appropriate after 25 years
  - long term approach needed that addresses: drivers, behaviors & transmission probability
    - and builds the human & physical infrastructure needed to adequately cover all epidemiologically relevant populations
- Inefficient use of funds
  - rigid earmarks,
  - single intervention approaches (e.g. abstinence only),
  - under-funding of effective interventions for key populations,
  - many missed evaluation opportunities,
  - reluctance to use generic drugs,
  - excessive reliance on short-term TA from USA as opposed to building local capacity, etc.

Gaps in Knowledge

- Insufficient data:
  - Expected incidence patterns → effective targeting
  - Intervention effectiveness → effective programming
  - Intervention costs/coverage → effective management
  - Marginal program effectiveness → optimal funding levels
- Insufficient knowledge:
  - Biomedical: vaccines, microbicides, circumcision for MSM
  - Behavioral: mass mobilization interventions for high prevalence settings; better tailored interventions for key populations
  - Structural: how does one change the drivers?
  - Managerial/operational
  - [Treatment: adherence strategies, cost reduction strategies]
- However, imperfect information today no excuse for inaction

Recommendations

- Continue to invest in vaccines & microbicide development
- Develop new technologies to measure HIV incidence and software/tools to model epidemic behavior
- Innovate & experiment with new behavioral and structural prevention approaches
- LEARN WHILE DOING -- incorporate impact evaluations throughout programs with uncertain effectiveness
- Invest in education, not just training -- generate excess capacity to analyze/plan, to implement, to manage, & to evaluate
- Tie funding to performance
  - fund via the most efficient mechanism (e.g. WB, GF, bilateral)
  - fund the most efficient implementors, whether US-based or not; private, governmental or NGO; without pointless shackles (e.g. prostitution pledges)

Strengthening Health Systems

- Most HIV prevention occurs outside of the formal health system → little effect
  - Strengthening human and infrastructure capacity can contribute to system strengthening
  - Current short-term training/poaching approaches can have the opposite effect.
  - Far more important for care & treatment
    - Massive increases in funding appear to be strengthening health systems
    - but the same conclusion applies regarding human resources

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