Making Limited Evidence Useful for Today's Decisions

**Geneva, 19th March, 2007**

# Preventing HIV/AIDS in Young People

## a systematic review of the evidence from developing countries


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# Overview of the Presentation

- Setting the scene
- Evidence for what, and what's evidence?
- Methods and findings of the systematic review: *Steady Ready GO!*
- Caveats, challenges and conclusions

# What do we know about Responding to Complex Issues?

- Many different things need to be done (eg. information, services, protection, etc.)
- Many different groups need to be reached (eg. all young people and most-at-risk young people)
- Things need to be done in many different ways (eg. *individual* and *community*)
- Things need to be done at many different levels/time frames (eg. *vulnerability* and *risk*)
- Many different people need to be involved in doing what needs to be done (eg. health, education, employment, etc.)

# BUT …

- **If we can't make it simple and sell-able we are never going to be able to move programming**
- We need to focus on a few priorities that have *legitimacy* and an *evidence-base* for effectiveness

# 25 years into the HIV epidemic

- There are still 5-6,000 young people becoming infected with HIV every day: young people remain at the centre of both generalized and concentrated HIV epidemics
- There are global goals and targets on HIV and young people that have been endorsed in a range of fora, but we are **far** from achieving them
  - Decreasing prevalence
  - Decreasing vulnerability
  - Increasing access to information, skills and services (95% of 15-24 year olds by 2010!)
- The evidence for action remains rather fragile, particularly from developing countries, but it is growing stronger!

# There are growing resources available in countries for HIV interventions, BUT ...

- There is increasing competition for these resources, and prevention among young people usually not at the front of the queue
- Although young people are at the centre of the epidemic, people *still* questioning:
  - if we really need a special focus on young people
  - if it is worth investing in programmes for young people, because it is not clear if the interventions are effective
- The current investment in programmes for young people is inadequate, and what resources *are* available are not always well used
- People frequently confuse moral opinions with evidence!

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# What we do NOT need in 2006:

- More reviews of the evidence that end up saying that we really don't know what works, and we need more research
- More well intentioned "spraying and praying"
- More decision makers using lack of evidence as an excuse for lack of implementation

# What we DO need in 2006:

- Ways to use the available evidence that provide policy makers and programmers with guidance about what to do (and what not to do)
- Ways to assess the available evidence that are transparent and systematic
- Consensus within the UN and other partners about priorities for action

# Para 26 of the 2006 High Level meeting in New York

- **Commit** to address the rising rates of HIV infection among young people to ensure an HIV-free future generation through the ***implementation of comprehensive, evidence-based prevention strategies***, responsible sexual behaviour, including the use of condoms, evidence- and skills-based, youth specific HIV education, mass media interventions, and the provision of youth friendly health services

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# What's "evidence"?

- Different perspectives on evidence
  - from RCTs to anecdote
  - from quantitative to qualitative methods
- Do we need the same level of evidence for all types of interventions?
- Policy makers and programmers will not wait for researchers to produce “perfect” evidence, and evidence is only one of the factors that they use to make decisions

# Evidence for what?

- Evidence that young people have specific needs and require special attention
- Evidence for different outcomes:
  - to decrease HIV prevalence
  - to decrease proximal determinants (behaviours, risk and protective factors)
- Evidence that specific interventions prevent HIV transmission (eg. needle exchange, condoms, circumcision)
- Evidence that specific behaviours will prevent HIV transmission (eg. ABC … to Z)
- Evidence that we are able to **DO** what needs to be done (from efficacy to effectiveness)
- Evidence to confirm common-sense!

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# *Steady Ready GO!*

## A review of the evidence for the effectiveness of interventions to prevent HIV in young people in developing countries

World Health Organization

London School of Hygiene and Tropical Medicine

Joint United Nations Programme on HIV/AIDS
UNAIDS
UNICEF • UNDP • UNFPA • UNDCP
ILO • UNESCO • WHO • WORLD BANK

unicef
United Nations Children's Fund

UNFPA

And others!

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# Objectives of the Review

- To inform the choices that policy makers and programmers need to make about interventions to achieve the global goals on HIV and young people
- To provide a detailed review of the evidence for the effectiveness of interventions to prevent HIV among young people in developing countries
- To develop a standard methodology for reviewing different types of interventions in different settings

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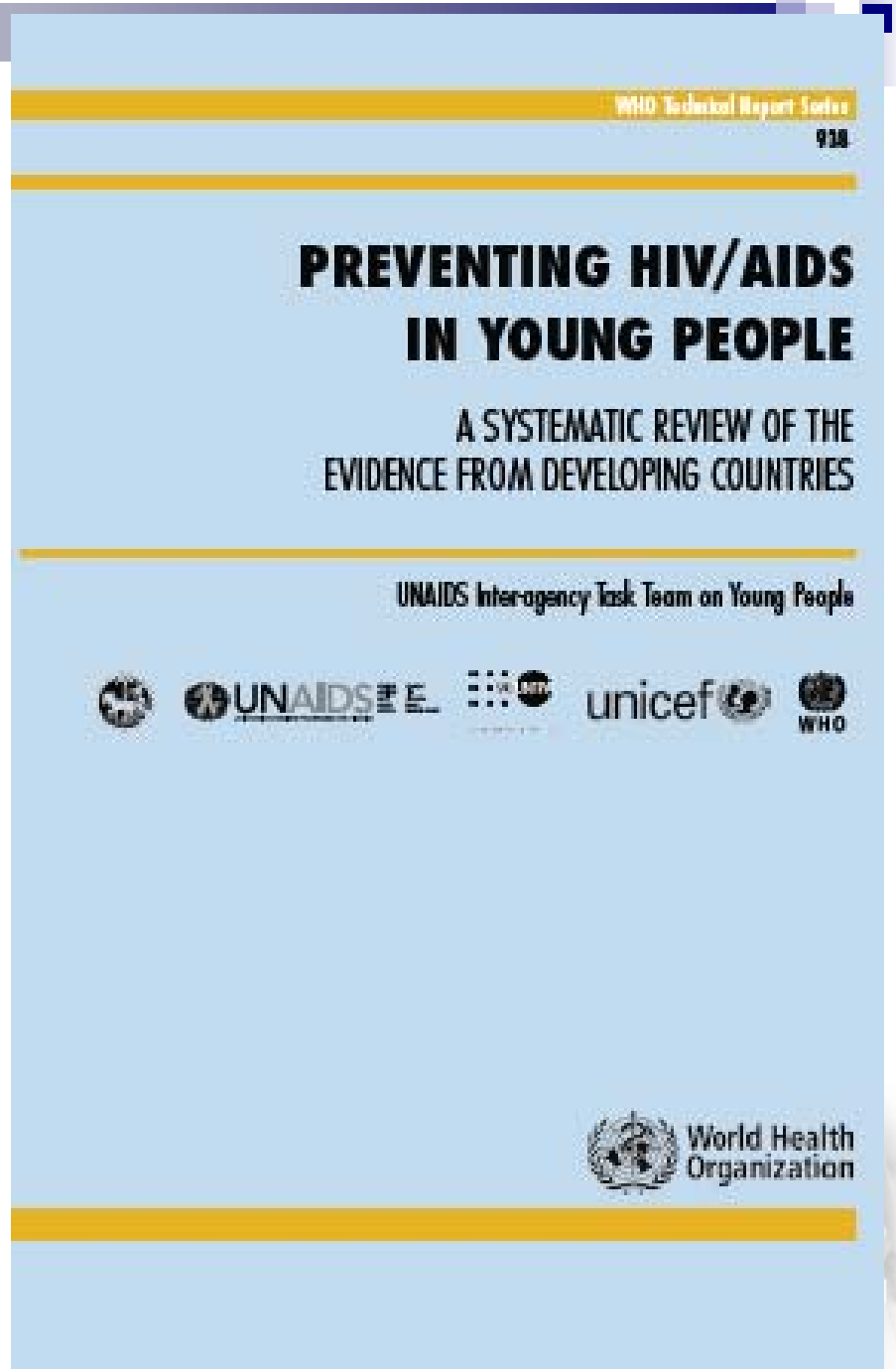
## Section 1: Background

- Introduction
- Overview of HIV among young people
- Overview of HIV prevention interventions

## Section 2: Systematic Reviews

- Methodology
- Reviews of interventions in different settings:
  - Schools
  - Health services
  - Mass media
  - Geographically-defined Communities
  - Vulnerable groups most at risk of HIV

## Section 3: Conclusions and recommendations



# Methodology

1. **Be clear about the outcomes**

# Need to be clear what we are trying to achieve with our interventions

- **The Global Goals:**
- **Decrease prevalence of HIV** … but many things need to be done, few studies had data on this, although imperfect surrogates available (eg. behaviour)
- **Decrease vulnerability** … structural interventions often long-term, and the evidence is often fragile
- **Increased access to core interventions**:
  - **Information**: knowledge
  - **Skills**: self efficacy
  - **Services**: utilization

# Methodology

1. Be clear about the outcomes
2. **Select the main settings where interventions are provided for young people**

# Need to be clear about the settings through which we can reach young people with information, skills and services

- Schools
- Health Services
- Media
- Communities
- Reaching young people most at risk

# Methodology

1. Be clear about the outcomes
2. Select the main settings where interventions are provided for young people
3. **Categorise interventions in these settings into *types*, based on the choices policy makers and programmers need to make**

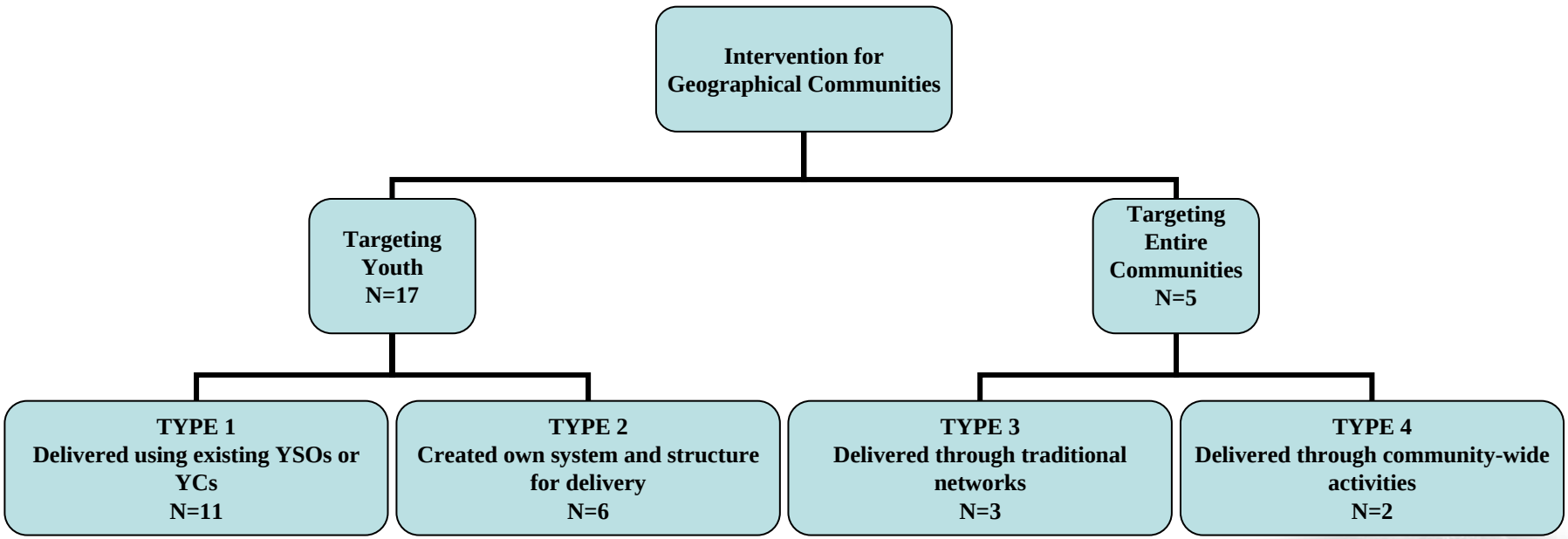
# Need to be clear about different Types of interventions in the different settings

## *Example: Geographically-defined communities*

1. **Targeting youth; delivered through existing Youth Service Organisation (YSO) or Youth Centre (YC)**
2. **Targeting youth; delivered through new systems or structures**
3. **Community-wide; delivered through traditional networks**
4. **Community-wide; delivered through community activities**

# Geographically defined Communities

## Types of Interventions




# Being clear about what is actually being done: *Types* of "youth-friendly health services"

| **Facility based actions** | **Only training providers and making changes in the facilities** | ***Also* providing information about the services to YP in communities** | ***Also* involving other sectors (eg. schools and media)** |
|---|---|---|---|
| **Training service providers and other clinic staff** | Type 1 | Type 2 | Type 3 |
| **Making changes in the facilities to make them more "adolescent-friendly"** | Type 4 | Type 5 | Type 6 |
| **Training service providers *and* making changes in the facilities** | Type 7 | Type 8 | Type 9 |

# Methodology

1. Be clear about the outcomes
2. Select the main settings where interventions are provided for young people
3. Categorise interventions in these settings into *types*, based on the choices policy makers and programmers need to make
4. **Assess the strength of evidence of effectiveness that would be needed to recommend each type of intervention for widespread implementation (the "*evidence threshold needed*")**

# The *threshold of evidence needed to recommend wide implementation*

**Different interventions need different thresholds of evidence … this depends on:**

- **Feasibility (including cost)**
- **Potential for adverse outcomes**
- **Acceptability**
- **Potential size of the effect**
- **Other health or social benefits**

# *Strength of evidence needed*

## **Example**: Interventions for geographically defined communities: working through youth-serving organizations

| Feasibility | Lack of potential for adverse outcomes | Acceptability | Potential size of effect | Other health or social benefits | Strength of Evidence Needed |
|---|---|---|---|---|---|
| +++ | ++ | +++ | ++ | ++ | Low |

# *Strength of evidence needed*

**Example: Interventions for young people most at risk that include information and services, through facilities and outreach**

| Feasibility | Lack of potential for adverse outcomes | Acceptability | Potential size of effect | Other health or social benefits | Strength of Evidence Needed |
|---|---|---|---|---|---|
| + | - | + | +++ | ++ | Medium |

# Methodology

1. Be clear about the outcomes
2. Select the main settings where interventions are provided for young people
3. Categorise interventions in these settings into *types*, based on the choices policy makers and programmers need to make
4. Assess the strength of evidence of effectiveness that would be needed to recommend each type of intervention for widespread implementation (the "*evidence threshold needed*")
5. **Assess the strength of the empirical evidence available for each type of intervention in terms of specific outcomes, grading the evidence using standard criteria**

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# Assessing the available evidence for different interventions … need to consider:

- Quality of the intervention
- Quality of the evaluation methodology
- Clarity about outcomes and their measurement
- Relevance of the context
- Reproducibility

# A hierarchy of evidence

**Informed judgement:** Key informant interviews, Delphi techniques

**"Adequacy":** The expected changes occurred

Before and after studies or time series studies, without a control group

**"Plausibility":** Adequacy +

The changes were greater than could be explained by any other external influences

Control group included (eg. quasi experimental)

**"Probability":** Plausibility +

Changes were unlikely to have occurred by chance

RCT

(*after Habicht et al 1999*)

# Non-RCTs are most useful within the grey zone

**Need RCTs**

**New medical products & tests**

**Grey zone**

**Alternative delivery systems for “proven effective” interventions**

**Plausibility evidence acceptable**

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# Methodology

1. Be clear about the outcomes
2. Select the main settings where interventions are provided for young people
3. Categorise interventions in these settings into *types*, based on the choices policy makers and programmers need to make
4. Assess the strength of evidence of effectiveness that would be needed to recommend each type of intervention for widespread implementation (the "*evidence threshold needed*")
5. Assess the strength of the empirical evidence available for each type of intervention in terms of specific outcomes, grading the evidence using standard criteria
6. **Decide if the evidence threshold needed to recommend widespread implementation for each type of intervention has been met?**

- **Yes fully:** **GO!**
- **Partially:** **Ready**
- **No, but encouraging:** **Steady**
- **Evidence of lack of effectiveness or harm:** **Do not go**

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# Strength of evidence required to recommend widespread implementation

| Strength of evidence required | Characteristics |
|---|---|
| **Very Low** | Informed judgement, and at least some positive evidence from adequacy studies |
| **Low** | Need positive evidence from well-conducted adequacy studies, and at least some positive evidence from plausibility studies |
| **Medium** | Need positive evidence from well-conducted plausibility studies, at a minimum |
| **High** | Need positive evidence from well conducted RCTs or quasi-experimental studies |
| **Very High** | Need positive evidence from ≥ well conducted RCTs |

# Recommendation for each type of intervention

| | |
|---|---|
| **Go!** | **Take these interventions to scale NOW!** |
| | **Sufficient evidence to recommend widespread implementation on large scale now, with careful monitoring (coverage & quality … & cost)** |
| **Ready** | **Implement widely but continue to evaluate** |
| | **Evidence suggests interventions are effective, but large-scale implementation must be accompanied by further evaluation to clarify impact and mechanisms of action** |
| **Steady** | **More research and development still needed** |
| | **Evidence is promising, but further intervention development, pilot testing and evaluation urgently needed before they can move into the "ready" or the "do not go" categories** |
| **Do not go** | **Not the way to go …** |

# Interventions that are *GO!*

| | |
|---|---|
| **Schools** | Curriculum-based, skills-based sexual health education, led by adults +/- peers, with specific characteristics (developing the curriculum, content, implementation)* |
| **Health Services** | Training of service providers and clinic staff, facility improvements, and actions in the community |
| **Mass media** | Messages delivered through radio & other media (eg. print media), with or without TV* |

*** Provided they follow best practice, both in terms of content and process**

# Interventions that are Ready

| | |
|---|---|
| **Geographically defined communities** | Interventions that explicitly target young people, and that are delivered through existing systems and structures |
| **Young people most at risk*** | Interventions that provide information and services, through facilities and outreach |

* **Including evidence from studies that did not disaggregate by age**

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# Caveats

- This is not the final answer!
- Just because there is no "evidence", doesn't meant that it doesn't work!
- Very variable evidence-base for different settings
- Did not deal with:
  - structural interventions to decrease vulnerability
  - interventions in the political environment
  - all settings (eg. prisons, work)
  - all vulnerable groups at high risk of HIV (eg. migrants)
  - care, support and treatment

# Challenges

- How to interpret the findings from studies that included multiple interventions?
- How to take into consideration the fact that "young people" are not all the same?
- How to take into consideration different contexts?
- A range of costing issues require consideration
- Few rigorous studies looked at actions to create a favourable environment for intervention delivery
- The importance of structural interventions

# Implications for Action

- The comprehensive and transparent approach, and the SRG categorization of interventions resonates with policy makers and programmers
- Provides guidance for policy and programme decisions about interventions that should be widely implemented: **GO!** with careful monitoring, and **Ready** with careful impact evaluation
- Provides a research agenda: moving **Steady** to **Ready** or **Do not go**; and **Ready** to **GO**!

# Thank You