

# EXECUTIVE SUMMARY

## Background

The Thailand Government policy of universal access to Anti-retroviral therapy (ART), which was adopted in 2003, has seen a huge proportion of HIV program resources go to treatment. This resulted in reduced share of funding for prevention and mitigation interventions. Implementation of 100% condom use program has been successful in reducing HIV infections among venue based sex workers. However, infections among non-venue based sex workers have increased. The dynamic sex behaviour among the population requires country specific evidence on effective and cost effective interventions. Such interventions affect knowledge and attitudes and influence psychological and social correlates of risk to HIV in different population groups. Among high risk groups such as MSM, IDUs and female sex workers, there is a need for effective interventions and evidence based program re-orientation.

## Objectives

The objective of this study is to systematically assess the coverage of cost effective HIV prevention interventions as well as the coverage of interventions proven to be ineffective and non cost effective in nine population risk groups. These are: (a) female sex workers (FSW), (b) men who have sex with men (MSM), (c) injecting drug users (IDUs), (d) sero-discordant couples, (e) pregnant women, (f) prison inmates, (g) healthcare workers, (h) young people and (i) general population. This information is vital for strengthening, scaling up or maintaining high coverage of proven effective and cost effective interventions and curtailing the ineffective and non-cost effective interventions.

## Methods

We applied the evidence on effectiveness and cost effectiveness of HIV prevention interventions by Teerawattananon et al in chapter 3 which is categorized into four main groups: (1) interventions proven both effective and cost-effective, (2) interventions proven effective but without evidence on cost effectiveness, (3) interventions proven effective but not cost effective, and (4) interventions proven neither effective nor cost effective. Effectiveness and cost effectiveness of these interventions are specific for the nine different population groups. In the matrix of interventions, the most recent coverage rates were retrieved from reviews of relevant documents, published and unpublished grey literature in the Ministry of Public

Health, and other small programs/pilots. In-depth interviews of key informants were conducted where coverage data does not exist for the best expert estimates. Investment in different prevention interventions referred to various estimates in the National AIDS Spending Assessment.

## Results

Based on a matrix of 25 prevention interventions in 4 clusters, nine tables, one for each of the nine population groups were produced. The table is a matrix of 4 levels of evidence on the effectiveness and cost effectiveness of interventions using the “traffic light colour” system and three stages of implementation: [a] no policy and interventions; [b] interventions exist but no coverage data; and [c] interventions exist with coverage data.

A conceptual approach of interpretation of mismatches of intervention was developed. Mismatches are defined as [1] interventions proven effective and cost effective but there is neither policy nor program implementation, and [2] interventions proven ineffective and not cost effective but there is program implementation.

Our critical assessment identified seven mismatches in [1]. Two interventions require further evidence on applicability, and acceptability to guide policy and programmatic designs. These are: [i] female condoms for FSWs where operational research to test acceptability and program feasibility in the Thai context is needed; and [ii] male circumcision in newborns needs to generate evidence on public acceptability in the Thai context. Two interventions require immediate policy actions: [i] free distribution of condoms to MSM and IDUs; and [ii] needle social marketing for IDUs. Three interventions require attention: [i] provider initiated counselling and testing (PICT) offered to pregnant women; [ii] abstinence plus in young people; and [iii] microfinance policies that are not applicable for the Thai settings, but microfinance combined with education which has been proved to be effective.

One mismatch was identified in [2] post exposure prophylaxis (PEP) for healthcare workers is neither effective nor cost effective and should be terminated. However, this is politically not easy on the grounds of occupational safety. It is recommended to keep it as the incidence of occupational injuries and their financial implications to the government are low. PEP should be modified towards a comprehensive prevention package.

The matches are [3] interventions proven effective and cost effective are being implemented and [4] interventions proven ineffective and not cost effective are not implemented.

Interventions under [3] should be strengthened and/or sustain the high performance. These include free condom distribution to female sex workers, methadone substitution treatment in public clinics, VCT and PMTCT for pregnant women, screening of HIV antigens, antibodies and others in all donated blood, and an increase in alcohol tax which has an indirect impact on vulnerability to HIV infections. Note that interventions under [4] must not be initiated.

## **Discussion and policy recommendations**

Sero-sentinel reports of high prevalence in three population groups, female sex workers, MSM and IDUs, require priority attention. Evidence from the Behaviour Surveillance Survey indicates that young people are emerging as a new priority due to their vulnerability to HIV infection.

Inmates are the most vulnerable and socially disadvantaged group, often with repeated imprisonment, especially cases dealing with drugs. They are often IDUs with TB and HIV co-infections. As a captive population, there is a great opportunity to introduce and continue effective interventions in prisons and beyond when they are released back to society. Policy makers may consider offering an integrated package such as distribution of condoms, VCT services, provision of ART and TB treatment, and ensuring continued service beyond prisons after being released back to society.

Inadequate capacity to treat sexually transmitted infections (STIs) was identified as a major programmatic bottleneck resulting in a resurgence trend of STI incidence. This requires a major review of the STI program.