Gauging Pre-Exposure Prophylaxis (PrEP) Acceptability and Expanding PrEP Access as an HIV Prevention Intervention for Key Populations in Thailand

COUNTRY: Thailand

Two PrEP pilot studies have been successfully implemented in Thailand: the Centers for Disease Control and Prevention (CDC) Key Population Implementation Study (KPIS) and a sub-study conducted by U.S. Agency for International Development (USAID) LINKAGES. These studies demonstrated that PrEP is an appropriate prevention strategy for men who have sex with men (MSM) and transgender women (TGW) and can be implemented in both community- and facility-based settings. Findings highlight the need for education about PrEP, if uptake is to be successful.

WHAT WAS THE PROBLEM?

In September 2015, the World Health Organization (WHO) recommended “oral pre-exposure prophylaxis (PrEP) as an additional prevention choice for people at substantial risk of HIV infection as part of combination HIV prevention approaches.” WHO defines substantial risk as incidence of HIV infection in the absence of PrEP that is >3%. Offering PrEP at such incidence could potentially make it a cost-saving (or cost-effective) intervention. For this reason, implementing partners have requested guidance for PrEP implementation. In response, WHO developed modules to support the implementation of PrEP among a range of populations in different settings.

Because PrEP is a relatively new prevention intervention, especially in PEPFAR-supported countries, partners will need technical assistance 1) to scale best practices with fidelity, but also 2) to refine and scale to address the diversity of target populations across varied settings.

WHAT IS THE SOLUTION?

Below are details of two PrEP pilot studies that have been successful:

**CDC KEY POPULATION IMPLEMENTATION STUDY (KPIS) STUDY**

In Thailand, the Centers for Disease Control and Prevention (CDC) supported a study to implement a Test, Treat, and Prevent HIV Program at five hospitals in four provinces to increase HIV testing, to initiate those who test positive on antiretroviral therapy (ART), and to increase knowledge or and access to PrEP (PrEP was offered only at two of the five hospitals).

The primary objective for the PrEP component of the pilot was to determine if HIV-negative MSM and TG would choose to take PrEP. The team also documented factors associated with PrEP acceptance (i.e., attitudes towards PrEP, knowledge about PrEP, treatment venue: facility-based vs. community-based).

This study included a respondent-driven, sampling-based, peer-driven recruitment intervention (PDI) to enroll Thai MSM and TGW who reported anal intercourse without condom use within the previous six
months. HIV-positive patients were systematically offered ART, while HIV-negative patients were offered PrEP.

**Pilot Success:** Of the 1880 people enrolled, 531 tested HIV-negative; of these, 167 (31%) began PrEP, with those reporting sex with an HIV-infected partner ($p=0.003$), receptive anal intercourse ($p=0.02$), or receiving PrEP information from a hospital ($p<0.0001$) being more likely to initiate PrEP than those without these behaviors or characteristics.

While the CDC KPIS pilot study successfully initiated one-third of the eligible participants on PrEP, there were differences across the sites, which need to be further explored. Notably, uptake of PrEP differed by the two sites where it was offered. LerdSin Hospital had an uptake rate of 75.6% (84 out of 111) versus the 20% (83 out of 420) uptake rate at Thammasat Hospital.

Despite the limited marketing of the study, enrollment was successful. An analysis to compare those who were recruited through the PDI vs those who “walk-in on their own” still needs to be conducted. In addition, demand creation, to increase marketing and awareness of PrEP as a prevention strategy, could possibly improve uptake.

Key elements of success:

- Offering PrEP systematically and analyzing early vs. late vs. non-PrEP adopters;
- Multiple streams for enrollment (PDI and walk-in); and
- Demand creation for PrEP (which needs to increase further).

**USAID Linkages Study**

U.S. Agency for International Development (USAID) LINKAGES supported the availability of PrEP through a community-based network of nine key-population-led community health centers in four provinces, an MSM-owned and operated private clinic, and a well-known and long-established HIV testing center operated by the Thai Red Cross. Through a unique collaboration arranged by the Thai Red Cross, through support from Her Royal Highness Soamsawali, who is a member of the Thai Royal Family, free PrEP is available at LINKAGES-supported sites and is known as the “Princess PrEP” Program.

PrEP was advertised through outreach workers, community events, MSM applications (apps), and websites frequented by MSM and TGW in Thailand, including “TestBKK” operated by the Asia Pacific Coalition on Male Sexual Health (APCOM). Furthermore, in order to understand the characteristics of PrEP uptake during this initial period of introduction, a cohort of users was established as part of a multi-year LINKAGES KPIS Test & Start Study.

Between June 2015 and June 2017, PrEP-use increased from only a few individuals to almost 3,500, with a majority of that scale-up occurring within the past year. The graph below illustrates the increase of PrEP-use at a number of sites. The Pulse Clinic, Princess PrEP and PrEP-30 account for the highest numbers.
Key elements of success:

- Availability of both free PrEP, as well as modestly priced PrEP (approximately $1 per day);
- Well-established networks of community-based organizations that were able to educate clients about PrEP;
- Social media-based information about PrEP and users’ experiences (this is an opportunity for further scale-up); and
- High level political support from a respected leader

WHAT WAS THE IMPACT?

CDC KPIS & CDC/USAID KPIS SUB-STUDY

The CDC KPIS PrEP pilot successfully initiated about 1/3 (n=167) of the eligible participants onto PrEP. The USAID LINKAGES KPIS sub-study had 37% of their participants initiate PrEP. As of the third quarter of PEPFAR Fiscal Year 17, the Asia Regional Team newly initiated 1,041 HIV negative individuals on PrEP (as measured by the PEPFAR PreP_NEW indicator). This result is 93% of the target set for the fiscal year. Moreover, as of the fourth quarter of the same fiscal year, the data on newly initiated on PrEP was examined at the age and sex disaggregated level. According to the data, the majority of PrEP users are male, with 76% aged 25-49, 15% aged 20-24, and 2% aged 15-19. While 17% are under 24 years of age.
Importantly, finer age disaggregates for the 25-49 age band will help to determine if younger men are initiating PrEP. These are strong results, which support that PrEP, if offered, can be scaled as a prevention intervention for MSM and TW.

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Table recreated by the PEPFAR Solutions Team, based on data from DATIM

**HOW DOES IT WORK?**

**INDIVIDUAL LEVEL**

In Thailand, the estimated HIV prevalence among MSM and TGW is 19% and 14%, respectively. Although substantial efforts to scale-up HIV testing for these populations have been in place for several years, in addition to proactive referrals to ART treatment, PrEP was only formally made available in late 2015.

**CDC KPIS:*** From April 2015 through October 2016, 1967 people were assessed for enrollment, 1880 (95.6%) met eligibility criteria and chose to enroll. Demographic data were available for 1873 of enrolled participants. The median age was 23 years, 670 (35.8%) had more than a secondary school education, and 433 (23.1%) identified as TGW.

**CDC & USAID KPIS Sub-study:** Among the 274 participants enrolled in the PrEP sub-study (54 from community-based organizations (CBOs) and 220 from hospitals), PrEP uptake was 37% (61% in CBOs, 31% in hospitals, p<0.001). Participants from CBOs were older than those from hospitals (27 vs. 23 years, p=0.004), more likely to be trans-gender (54% vs. 23%, p<0.001), be sex workers (p<0.001), have higher income (p=0.04), have used illicit drugs in the past 6 months (p<0.001), have lower PrEP knowledge (p=0.007), and less likely to consider cost as a barrier for PrEP use (p=0.001).

Among participants enrolled at CBOs, 37% perceived themselves to be at moderate to high HIV risk, as did 39% at hospitals (p=0.96). 67% reported unprotected sex in the past 6 months at CBOs, versus 60% at hospitals (p=0.37). Overall, 10% of participants did not want to pay for PrEP, while 78% were willing to pay 30 USD or less per month. Enrollment in the community-led PrEP model, living with partners, and sexually transmitted infections in the past 6 months) were predictors of PrEP use. Number of sex
partners, perceived HIV risk, condom use, drug use, and knowledge of or attitudes toward PrEP did not demonstrate statistically importance in an individual’s decision to initiate PrEP.

LESSONS LEARNED

Meaningful Engagement: The PEPFAR Asia Regional team has embraced the concept of meaningful engagement and has developed collaborative relationships with key populations and civil society organizations (CSOs). They have utilized the Local Capacity Initiative to improve the technical and organizational capacity of consortium partners; provide effective, cost-efficient, and sustainable TA; and enhance, broaden, and expand local and regional civil society advocacy efforts. The Local Capacity Initiative has also served to improve local and regional CSOs’ capacity to successfully award and program small grants and advocate for improved programs and policies for key populations, as well as increase accountability of national HIV and AIDS responses. The KP Challenge Fund (KPCF) has engaged key populations and helped Thailand to develop, demonstrate, and disseminate enhanced intervention models to intensify HIV, STI, and TB case finding among MSM, trans-gendered persons, and other key populations, and to support early and sustained access to prevention, care, and treatment services.

SYSTEMS AND SERVICES LEVEL

CDC KPIS and CDC & USAID LINKAGES KPIS Sub-Study: These studies demonstrated that PrEP is an appropriate prevention strategy for MSM and TGW and that it can be implemented in both community and facility settings. Individuals recruited from the peer-driven modality, as well as those who “walked-in” for HIV-testing were receptive to learning about PrEP, with a significant number initiating on this preventative medication. Offering diverse settings, with KP-friendly staff, will increase the number of MSM and TGW that get tested, receive prevention messages, and potentially initiate PrEP, or if HIV-positive get started on treatment.

Findings highlight the need for demand creation through education, awareness campaigns, and targeted marketing, if uptake is to be successful. Creating KP-friendly sites will increase the number of hard to reach MSM and TGW through PDI, but also through word of mouth in KP communities; thus, walk-in clients may increase overtime. Importantly, PrEP as a prevention intervention lends attention to the full HIV cascade and not only treatment for the infected.

LOCAL ENVIRONMENT

One of the Asia Regional program’s strengths is its engagement with the community. The success that exists around PrEP, whether through research and implementation science projects or Regional Operational Plan (ROP) activities, has been based upon engagement of key populations and community stakeholders.

NATIONAL ENVIRONMENT

Discussions are ongoing with the Thai MOH regarding PrEP implementation and roll-out at the national level. The National Health Security Office (NHSO) has made a financial commitment to the “Thai Fund” of 200 million Thai baht (THB) for HIV prevention in KPs. A discussion is also occurring specifically for the
inclusion of PrEP costs in the National Health Scheme. Also, PrEP has the support of Her Royal Highness Soamsawali, a member of the Thai Royal Family. Thus, the discussion of PrEP is occurring across national government entities. Engagement of all partners (e.g., government, community and private) will need to continue, if PrEP is to be scaled up in a cost-efficient manner.

SCALE UP

PrEP is being rolled out, targeting MSM and TGW in priority provinces (Bangkok, Chiang Mai, Chonburi, Songkhla, Udon Thani, Khon Kaen) which have the largest estimated numbers of people living with HIV (PLHIV), the largest estimated numbers of MSM and TGW, and the largest combined numbers of key populations in Thailand.

Lessons learned from implementation of PrEP pilot studies (KPIs) at facility sites are being used to scale-up access to PrEP in nine clinics in seven provinces with the financial support from the Thai Government and technical support from the PEPFAR Asia Regional Program. The PEPFAR Asia Regional Program is supporting PrEP expansion in FY18 by working with the Thailand Ministry of Public Health (MOPH) to scale-up access to quality PrEP services at pilot PrEP2Start sites. Through a generous donation from Her Royal Highness Princess Soamsawali, access to free PrEP at community sites is available. There are some high-income MSM who are willing to pay for low cost PrEP at a tailored, private-clinic setting.

Resources for PrEP Implementation (see links in the Resources section):

- WHO implementation tool for pre-exposure prophylaxis of HIV infection:
  - WHO has developed a series of modules to support the implementation of PrEP among a range of populations in varied settings. It provides important considerations when initiating an individual on and monitoring PrEP use, as well as considerations for community-led activities that aim to increase knowledge about PrEP and generate demand and access. Information on how to monitor PrEP for safety, effectiveness, and adherence is also provided.

- ICAP-developed PrEP Tools (Available in English and Spanish)
  - Introduction to the Pre-exposure Prophylaxis (PrEP) Package
  - Pre-Exposure Prophylaxis (PrEP) Screening for Substantial Risk and Eligibility
  - PrEP Training for Providers in Clinical Settings
  - PrEP Facility Record
  - PrEP Training for Providers in Clinical Settings
  - PrEP Client Register
  - PrEP Monthly Summary Form
  - Pre-Exposure Prophylaxis (PrEP) Quarterly Cohort Report

There are several factors that contributed to the success of these PrEP pilot studies:
Inclusion of Relevant Partners: The Asia Regional Team organized a Technical Steering Committee, which provided a forum to ensure collaboration, coordination, and communication between the Asia Regional Program (CDC & USAID), the Royal Thai Government, Thai Red Cross (TRC), civil society organizations, and other development partners in the implementation and evaluation of protocol-defined activities. The committee was highly engaged and met quarterly, both of which were critical for programmatic success.

Attention to Challenges for Target Populations: MSM and TGW face significant levels of stigma and discrimination. Thus, it was critical for staff to be well-trained and for the clinical setting, which included both community and facility sites, to be KP-friendly.

Access to Key Populations: Inclusion of members of the MSM and trans-gendered community who can foster trusting relationships through the PDI model increased the number of KP individuals who accessed resources.

Demand Creation/Marketing/Education: Time and resources invested in informing the target population about PrEP will continue to increase awareness and uptake of PrEP.

As with all new innovations, adequate resources must be devoted to information dissemination. That is, marketing and demand creation must occur if “buyers” are to invest in purchasing a new product. Over the three financial quarters, the number of individuals on PrEP progressively increased, (Q1 = 96; Q2 = 157; Q3 = 789) as more information spread amongst peers and site staff.

PEPFAR Team Involvement

The PEPFAR Asia Regional team, in collaboration with the Technical Steering Committee, developed and implemented the KPIS studies. This relationship was pivotal to the success of the community- and facility-based PrEP projects; that is, meaningful engagement with quarterly meetings, contributed greatly to programmatic success. Close monitoring allowed the team to realize that PrEP was a viable prevention intervention for MSM and TG. The Asia Regional Team based the scale-up of PrEP activities on its experience with research and implementation science projects and the team members have been true leaders in this area of HIV prevention.

IMPLEMENTING PARTNER

Working in close collaboration, CDC and USAID supported key implementing partners, including the Thai Ministry of Public Health (MOPH), the Thai Health Promotion Foundation (THPF), the Thai Red Cross AIDS Research Center (TRCARC), and Population Services International (PSI), to expand activities that served as the foundation for the scale-up of prevention intervention, in general, and PrEP, in particular. Key facilitating activities included the following:

- **Demand generation:** Promotion of the benefits of early HIV testing and treatment was provided through the “Buddy Station” web portal, community events, and the “Test BKK” campaign. The “Buddy Station” website served as a hub for uploading demand creation materials and other educational content, including information on early test-and-treat and pre-exposure prophylaxis initiation. The site’s main objective was to promote HIV testing and provide HIV education in an
PEPFAR SOLUTIONS PLATFORM (BETA)

engaging and accessible way. Activities were conducted to promote the website, including press visits and promotional events at areas where MSM congregate in Bangkok. KPCF funds also supported the “Test BKK” campaign, targeting MSM who may have faced elevated HIV risks through online sexual networks, and who are typically not reached through traditional peer outreach approaches.

- **Systems to incentivize case-finding:** Some innovative efforts have been implemented through PSI’s sub-partners to incentivize case-finding, however analyses of the potential costs/benefits are still in process. In particular, a partnership was formed with a magazine that is popular among MSM called “Attitude,” to disseminate key messages on the benefits and locations of KP-friendly HIV counseling and testing (HCT) services. This partnership included the use of gift vouchers from the private sector as complimentary rewards when readers accessed HCT services at community-based organizations. PSI has also deployed innovative approaches to conduct “virtual” outreach to MSM, who have not been reached through traditional outreach, at hotspots through applications like “Grindr” and “Line.” Efforts to incentivize pharmacists to support an HIV testing referral network are being explored.

- **Support for quality standards:** CDC has worked with the Thai Red Cross MSM clinic and the MOPH to develop a set of assessments for friendly MSM clinics. These assessment guidelines were developed as part of the MSM program funded by the NHSO and the same assessment guideline was used at the four MSM clinics in which the CDC and MOPH provided technical assistance. With USAID support, the TRCARC has been providing training and support for community providers to meet quality standards with respect to HIV testing and counseling (particularly using finger-prick sample collection) at the site level.

- **Investments in innovative information systems:** One national confidential unique identifier code (UIC) scheme now exists, and has made it feasible to follow clients confidentially across a cascade using a combination of UIC (in communities) and national ID (in HTS and ART sites).

- **Facilitating an enabling environment for service uptake:** Trainings to minimize stigma and discrimination now exist for HIV providers. TRCARC has also been training healthcare providers to supply services that are more relevant to the specific health needs of MSM and TGW.

**MONITORING**

The Technical Steering Committee coordinated program monitoring and evaluation. By remaining active and meeting quarterly, each critical for programmatic success, the committee could identify challenges quickly. The Asia Regional Team ensured that implementing staff were well-trained and KP-friendly; they included and utilized members of the MSM and trans-gendered community who fostered trusting relationships with the targeted populations. Recently, for the Regional Operating Plan PrEP activities, the Asia Regional Team is focusing on the dissemination of PrEP information (i.e., demand creation) through diverse strategies, including social media.
COMMUNICATIONS

As stated above, meaningful engagement was pivotal to success; that is, a forum to ensure collaboration, coordination, and communication between the Asia Regional Program (CDC & USAID), the Royal Thai Government, Thai Red Cross (TRC), key population and civil society organizations, and other development partners that met at least quarterly was critical for programmatic success.

COST

CDC KPIS Study: Costing Analysis

A standard method, ingredient-based cost-analysis was applied to derive the total financial cost and unit cost from the programmatic perspective. Retrospective data for 12 months was collected for PrEP analysis. The analysis assumed that the same facility staff would continue to provide services, and an equivalent cadre with the same pay scale would take over the activities performed by the project staff. Findings included the following:

- Cost per person per year (PPPY) for PrEP is less than cost PPPY for ART (12% to 31% lower depending on the price of PrEP regimen used).
- Overall, drugs were the key cost driver for PrEP (~83% of the cost).
- PDI drove down the cost intervention.

UNIT COSTS [Data from June 2015 to May 2016]

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Data provided by implementing partner

USAID / LINKAGES

A cost effectiveness analysis of PrEP is currently in process by the MOPH, with results expected in early 2018.
EFFICIENCY MEASURES

Since the volume of patients on PrEP will drive down the cost of the intervention, it will be important to assess how the Asia Regional Team is addressing this. Recommendations for using PDI, task shifting to a lower cadre of staff, and improving and expanding demand creation are all at varying degrees of adaptation and will all increase volume of KP persons accessing services.

RESOURCES


- PrEPWatch: [https://www.prepwatch.org/](https://www.prepwatch.org/)