Kingdom of Cambodia
Nation Religion King

NATIONAL CENTER FOR HIV/AIDS, DERMATOLOGY, AND STD (NCHADS)

ASSESSMENT REPORT

THE ACCEPTABILITY AND FEASIBILITY OF LONG-ACTING INJECTABLE HIV PRE-EXPOSURE PROPHYLAXIS (CAB-LA) AMONG MSM, TGW AND SERVICE PROVIDERS IN CAMBODIA

September 2023

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This report is made possible by the generous support of the American people through the United States Agency for International Development (USAID) and the U.S. President's Emergency Plan for AIDS Relief (PEPFAR). The contents are the responsibility of the EpiC project and do not necessarily reflect the views of USAID, PEPFAR, or the United States Government. Epic is a global cooperative agreement (7200AA19CA00002) led by FHI 360 with core partners Right to Care, Palladium International, and Population Services International (PSI).

Suggested Citation:

NCHADS/MoH-Cambodia. The acceptability and feasibility assessment of long-acting injectable HIV Pre-exposure Prophylaxis (CAB-LA) among men who have sex with men and transgender women in Cambodia, 2023.

Acknowledgment

The acceptability and feasibility assessment of long-acting injectable cabotegravir as human immunodeficiency virus (HIV) pre-exposure prophylaxis (CAB-LA PrEP) among men who have sex with men (MSM), transgender women (TGW), and service providers in Cambodia was made possible by the contributions and efforts of various development partners under the leadership of the National Center for HIV/AIDS, Dermatology, and STD (NCHADS). We want to take this opportunity to express our gratitude to the President Emergency Program for AIDS Relief (PEPFAR) through the United States Agency for International Development (USAID) for financial support and FHI360 EpiC Project, including Mr. Rang Chandary, Mr. Nhim Dalen, Dr. Steve Wignall who contributed their technical expertise, time, and energy for this assessment.

Our sincere thanks to Dr. Samreth Sovannarith and Dr. Ngauv Bora, Deputy NCHADS Directors, NCHADS Research Unit (Dr. Khol Vohith), NCHADS Behavior Change and Communication Unit (Dr. Tep Samnang), and NCHADS AIDS Care Unit who supported the training, field implementation, and coordination of the assessment. We also would like to thank all provincial health departments and relevant stakeholders for providing support during the assessment design, data collection, and consultation of the findings.

Finally, we thank MSM and TGW PrEP providers, PrEP coordinators, outreach workers, and UNAIDS, WHO, KHANA, RHAC, and MHC for their outstanding collaboration and participation. We hope that the findings of this assessment will be used to inform decision-makers, program implementers, and stakeholders to take concrete action to implement CAB-LA PrEP for MSM and TGW and maximize its impact on the reduction of new HIV infections in Cambodia.

Contents

Abbreviations

CAB-LA	Long-acting injectable cabotegravir
EW	Entertainment worker
FGD	Focus group discussion
HIV	Human Immunodeficiency Virus
IBBS	Integrated behavioral and biological surveillance
IDU	Injecting drug user
MSM	Men who have sex with men
NCHADS	National Center for HIV/AIDS, Dermatology, and STD
NGO	Non-government organization
PEP	Post-exposure prophylaxis
PrEP	Pre-exposure prophylaxis
STI	Sexually transmitted infection
TGW	Transgender women
TDF-FTC	Tenofovir disoproxil fumarate/Emtricitabine

Executive Summary

In 2019, the Government of Cambodia introduced oral HIV PrEP as an additional HIV prevention measure for key populations in the Kingdom [5]. Oral HIV PrEP has been found to protect against HIV infection in various clinical trials and risk populations [1]. CAB-LA is a long-acting extended-release integrase strand inhibitor administered intramuscularly (gluteal) at a dose of 600mg/3mL every four weeks for the first two months and then every two months after that [7]. The CAB-LA regimen has been found safe and efficacious in preventing HIV infection among MSM and TGW in the HPTN 083 study conducted in the Americas, Asia, and Africa [7]. NCHADS, supported by EpiC, FHI360 Cambodia, and local non-governmental organizations (NGOs), conducted this feasibility and acceptability assessment for CAB-LA PrEP among MSM and TGW populations in Phnom Penh.

Qualitative research methods were applied in this assessment. Focus group discussions (FGD) with MSM and TGW and in-depth key informant interviews (KII) were conducted with the key implementer-stakeholders/healthcare workers. The purposive selection of participants ensured equal representation and different backgrounds for members of the three groups. After completing the interview, summary transcriptions were made using the format provided by the EpiC SI team, FHI360.

Fifty-nine participants were recruited, including 31 MSM and 28 TGW. All respondents were between 19 and 45 years old, with a mean age of 28 for MSM and TGW. The youngest MSM participant was 19, and the oldest was 43. Similarly, the youngest TGW participant was 19, and the oldest was 45.

The assessment results are reported in alignment with the groups surveyed: ex-oral PrEP users' interest, current PrEP user interest, never-PrEP interest, and the perspectives of implementers, stakeholders, and healthcare workers concerning the feasibility of CAB-LA implementation in Cambodia.

> **Ex-PrEP Users:** Most mentioned they will try PrEP again using CAB-LA instead of the PrEP pill.
>
> **Current PrEP Users:** Nearly 9/10 mentioned that CAB-LA looks very interesting compared to current oral PrEP because of fewer side effects and an injection only once in two months. If CAB-LA were available in Cambodia, many would be interested in switching from oral PrEP to CAB-LA injection.
>
> **Never-PrEP:** CAB-LA and PrEP are new to them, but most consider CAB-LA better than current PrEP.
>
> **Implementors:** CAB-LA could be a good option for the MSM and TG, and all PrEP implementors and stakeholders strongly agree and will implement the CAB-LA in Cambodia.

Overall, the assessment found CAB-LA a good option for MSM and TGW. More choice for at-risk populations is a promising HIV prevention approach. Detailed information sheets for users and implementers that include benefits and side-effects and a comprehensive implementation SOP need to be developed.

1 Introduction

Oral PrEP has been found to protect against HIV infection in various clinical trials and risk populations [1]. Differences in the efficacy of HIV PrEP found in these studies could be primarily attributed to differences in adherence [2, 3]. To optimize PrEP efficacy, alternative strategies and choices are needed. Such strategies are essential for Cambodia, where the HIV epidemic among MSM and TGW continues to expand. Integrated behavioral and biological surveillance (IBBS) conducted among MSM in Phnom Penh found that HIV prevalence doubled from 3.0% in 2014 to 6.1% in 2019. Among TGW in the capital, the increase was even higher, from 6.5% in 2016 to 14.0% in 2019 [4]. Overall, in 2019, HIV prevalence in Phnom Penh and 12 high HIV prevalence provinces was 4.0% among MSM and 9.8% among TGW [4].

In response to these developments, the Royal Government of Cambodia added oral HIV PrEP as an additional HIV biomedical prevention measure for key populations in the Kingdom in 2019 [5]. By the end of that year, HIV PrEP was available for MSM and TGW in Phnom Penh, with plans for gradual expansion nationwide. Since then, 2,419 MSM and 976 TGW have initiated PrEP; as of July 2022, 59.2% of MSM and 58.9% of TGW continue to do so. In 2019, the total number of MSM and TGW in Phnom Penh and 12 high HIV prevalence provinces was estimated to be 21,847 and 3,170, respectively [6]. Considering the HIV prevalence and high-risk behaviors among them, thousands of MSM and TGW in Cambodia could benefit from PrEP, reducing their risk of infection and transmission to others. Considering continuing reports of newly diagnosed HIV infections among MSM and TGW in the National HIV Prevention Database, additional HIV prevention methods and approaches are needed.

Long-acting injectable cabotegravir (CAB-LA) may be such a method. CAB-LA is a long-acting extended-release integrase strand inhibitor administered intramuscularly (gluteal) at a dose of 600mg/3mL every four weeks for the first two months and then every two months after that [7]. The CAB-LA regimen has been found safe and efficacious in preventing HIV infection among MSM and TGW in the HPTN 083 study conducted in the Americas, Asia, and Africa [7]. CAB-LA was shown superior to daily oral tenofovir disoproxil fumarate–emtricitabine (TDF-FTC), with 13 new HIV infections in the CAB-LA group versus 39 in the TDF-FTC group (hazard ratio: 0.34) [7]. Based on these results, the US FDA approved CAB-LA for use in sexually active adults at risk for HIV infection in 2021 [8]. US CDC [9] and WHO [10] recommend CAB-LA as an additional HIV prevention choice for people at substantial risk of HIV infection. CAB-LA may be particularly important for Cambodian MSM and TGW (and others who are at risk for HIV infection, such as entertainment workers (EW), injecting drug users (IDU), and HIV-discordant couples[1]) who have adherence problems when taking oral PrEP, or for those who face other barriers in accessing HIV prevention services, such as fear of involuntary disclosure, stigma, and discrimination.

CAB-LA may also interest those who prefer a bi-monthly injection over daily or intermittent oral PrEP. Finally, it may provide a solution for those with severe kidney disease, which precludes using other PrEP medications. Another advantage of CAB-LA is that renal and lipid screening and monitoring are no longer required, reducing the burden on recipients and healthcare providers.

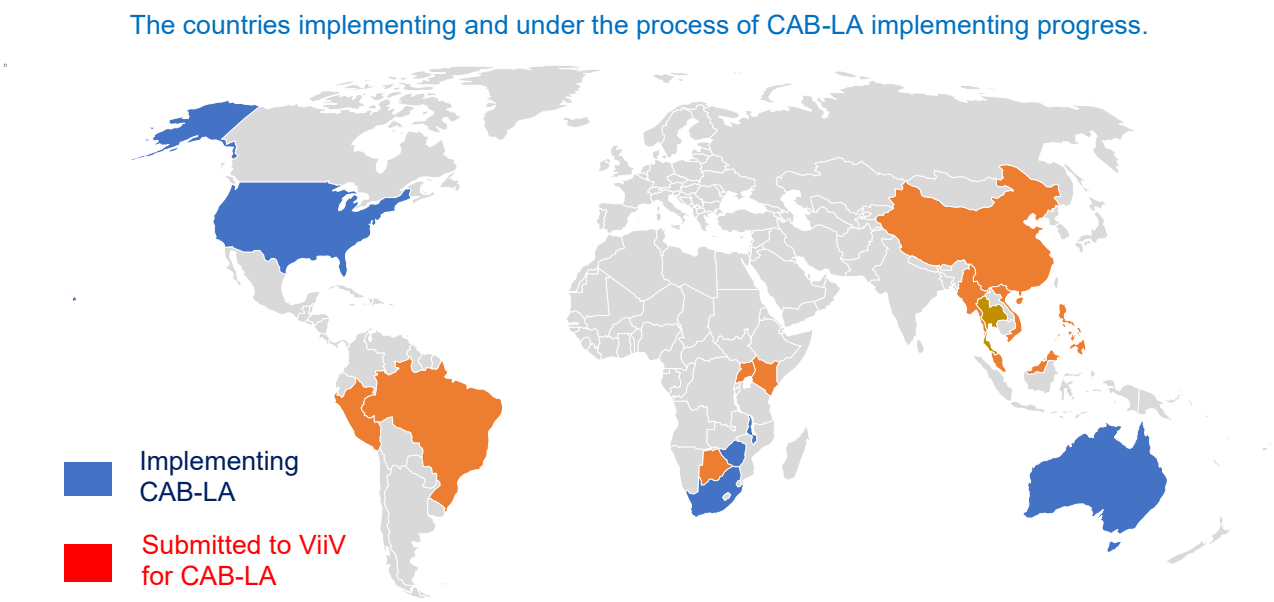
While several studies have reported high levels of future acceptability of injectable PrEP among MSM and TGW and prevention care providers [11-13], they also brought to light a wide array of outstanding concerns among these groups. These included fear of needles, fear of injection site pain, concerns about the location and type of injection, concerns about interaction

[1] *Currently MSM and TGW are the two main risk groups for HIV infection in Cambodia. Therefore, this protocol initially focuses on these two populations, but this does not imply that others at risk for infection, such as EW, IDU and discordant couples would not be able to access this intervention at a later stage. According to WHO, no CAB-LA efficacy studies have been conducted in these populations, although they may potentially benefit from sexual exposure to HIV. WHO recommends CAB-LA implementation studies be conducted in these populations first, before making more definitive recommendations for the use of this intervention [10].*

with other drugs (e.g., gender affirmative hormone therapy among TGW), concerns about side-effects, worries about waning of efficacy, concerns about the frequency of dosing, logistical challenges in keeping appointments, fear of high(er) costs, and operational issues (e.g., regulatory requirements regarding drug administration and fear of re-medicalization of PrEP among providers) [11-15]. The studies showed that these concerns varied widely across these groups (MSM vs. TGW vs. providers), geographic locations, and local cultures [11, 15]. For instance, in Asian traditional and modern medicine, there is a long-lasting belief that drug injections are more effective and are therefore preferred over other types of administration, such as topical or oral medication [16-19]. This may also be the case in Cambodia. For reasons described above, the present study will gauge the local MSM and TGW community (and possibly others at risk for HIV infection) and provider perceptions, concerns, and barriers to providing CAB-LA alongside other HIV prevention options (such as HIV post-exposure prophylaxis [PEP], condom-use and treatment for prevention) in clinic-based and possibly in key-population led settings. Such data will be essential to educate Cambodian MSM, TGW, others, and HIV prevention service providers, inform demand creation activities, program design, and address operational issues.

A ViiV Healthcare, the CAB-LA developer, a report released on 23 Mar 2023 indicated that five countries, including the United States of America, Australia, Zimbabwe, South Africa, and Malawi, registered and approved for CAB-LA use. Another twelve countries, Botswana, Brazil, Kenya, Uganda, Vietnam, Malaysia, Myanmar, Philippines, Peru, China, European Medicine Agency (EMA), and Thailand, have applied for CAB-LA registration and use [27].

Figure 1: The countries implementing and requesting approval to implement CAB-LA



2 Methodology

2.1 Study design

The qualitative study design employs focus group discussions (FGD) with MSM, TGW, and HIV prevention service providers as informants. FGDs gather in-depth data about a pre-defined topic of interest in a group setting, guided by a trained facilitator/data elucidator [20]. The main characteristic of a focus group is that the interaction is channeled between the moderator and the group, as well as between group members [21]. The objective is to understand the participants' perspectives on the topic of discussion. The quality of collected data from an FGD depends on three main factors.

First, on how healthy subjects are informed about the theme of interest, especially if the topic of interest is an innovative product that still needs to be used and of which participants are likely unaware. Since injectable PrEP is a highly complex issue for most people, the information provided to participants should be balanced and incorporate both the pros and cons of CAB-LA versus other PrEP options (as found in studies in other countries and settings) and be comprehensive [20]. An information sheet explaining CAB-LA, its pros and cons, and related issues was developed (see Annex 1 and translated into Khmer), which participants were asked to read and discuss/presented by the moderator at the start of each FGD.

The second main factor determining the data quality is the use of a well-developed and designed topic guide—not too long or too short. It uses clear language that invites discussion and is understandable, even for participants with low levels of literacy/education. This required testing each topic/question with potential members of each target audience (MSM, TGW, HIV prevention service providers).

The third key factor that determines the quality of collected data is the skill and attitude of the moderator. A Khmer-speaking focus group moderator was trained to lead discussions according to the FGD topic guide discussed above, including mock FGDs with a group of volunteers (role play), where the investigator observes and provides feedback on the moderator's performance. Before the FGD, each participant was asked to complete a socio-demographic record form (see Annex 2, to be translated into Khmer). A copy of the FGD topic guide can be found in Annex 3 (to be translated into Khmer). All FGD discussions will be digitally audio-recorded, and participants will be reimbursed for their transportation costs based on the travel distance.

2.2 Study sites

Study participants were recruited from MSM and TGW clients and staff at collaborating health clinics and from community-based organizations (CBOs). Sites included Chhouk Sar Clinic, Reproductive Health Association of Cambodia Clinic, Toul Kork Health Center, and Men's Health Cambodia, a local CBO, all located in the Phnom Penh metropolitan area. Focus groups were organized at these locations.

2.3 Study population

The study recruited MSM and TGW aged 15 years and older who were using, had used, were interested in, or needed to use HIV PrEP. HIV service providers employed by collaborating clinics and CBOs were also included. MSM and TGW study participants were purposively selected to achieve a balanced mix of ex-users, current users, those interested, and those needing PrEP and to ensure a mix with younger and older and better and less educated participants.

2.4 Sample size

A focus group literature search confirmed that eight to ten participants per discussion was ideal. The authors mentioned that saturation occurs after five to six groups (when no new concepts emerge from subsequent discussions and information becomes repetitive) [22]. Considering the influence of seniority on communication patterns in Southeast Asian cultures (in which seniors should be respected rather than questioned by juniors) [23], we organized separate FGD with MSM and TGW with participants and facilitators of similar ages.

We conducted six focus group discussions, two per group, allocating them according to participant's status: ex-PrEP users, current PrEP users, and never-PrEP. 31 MSM and 28 TGW were recruited to participate.

2.5 Data collection

FGD data was translated from the Khmer-language digital audio recording. After transcribing, the assessment team coded the data and conducted the analysis using Excel®. The data analysis was aligned with the groups surveyed using the coded translated texts: ex-oral PrEP users, current PrEP users, and never-PrEP, and the perspectives of implementors, stakeholders, and healthcare workers concerning the feasibility of CAB-LA implementation in Cambodia. The thematic analysis (i.e., searching for common themes, trends, and patterns) is reported.

2.6 Ethical Considerations

2.6.1 Recruitment

The recruitment process and steps of informing prospective participants ensured that they were fully aware of the nature of the study and the subjects to be discussed (see Annex 1), including the expectation that issues related to sexual exposure and prevention of HIV infection would be discussed, and the fact that the FGD was audio-recorded. It made clear that participants were allowed to withdraw from the research at any time without providing a reason and without any negative consequences.

2.6.2 Age of respondents

Data collected from IBBS and other surveys conducted in Cambodia show that MSM and TGW begin to engage in HIV high-risk behavior and need HIV prevention services from an early age [25, 26]. To better understand their needs and inform appropriate interventions, especially for young MSM and TGW, the minimum age for enrolment in the current study was 15 years. For providers, all trained professionals, the minimum age was 21 with at least one year of working experience.

2.6.3 Informed consent

Before starting each discussion, participants provided an oral informed consent form (see Annex 4, in Khmer). It clearly describes the study and that the participant is not obliged to discuss any specific issue and may withdraw from the discussion at any time without explanation and adverse effects. Participants were given information on how and where they could access HIV and STI testing and other HIV services if they wished to do so after taking part in the study.

2.6.4 Confidentiality and Data Safety

Any details that could identify a participant have been deleted or altered in the research report and will be in future publications that may emanate from the project. Data tapes and transcripts are stored in a safe location in the collaborating clinic and CBO office and password-protected computer files with passwords known only to the research team and the co-investigator. Participants were asked to identify themselves during the FGD using a nickname. No detailed identifying information about participants was included in the data transcripts or on the data storage device; no contact details of participants were kept.

2.6.5 Benefits, risks, and incentives

The study participants were offered HIV and syphilis testing and the opportunity to experience their health status if they wished to. The research team referred participants to affiliated clinics and NGOs for HIV testing. Participants were also offered health information, free condoms and lubricants, and referrals to needed HIV prevention services, including PrEP. There are no foreseeable risks or negative consequences from participating in these FGDs. In addition, all participants were provided a transportation fee based on their travel distance.

Findings

The results of this qualitative assessment were based on the level of interest in CAB-LA according to PrEP experience (ex-PrEP users, current PrEP users, and never-PrEP) and feasibility according to current CBO and facility-based PrEP providers. The analysis included socio-demographic comparisons of the two groups and levels of interest in CAB-LA as a function of participants' PrEP experience. Feasibility questions were based on the responses of current PrEP providers.

Socio-demographic

Participants were recruited as previously described and grouped according to PrEP experience: ex-PrEP users, current PrEP users, and never-PrEP users. Men categorized all participants as MSM and TGW. Some key stakeholders and NGO implementors were invited for the key informant interviews (KII), including UNAIDS, WHO, KHANA, RHAC, MHC, MHSS, Toul Kork Health Center, and Chouk Sar Clinic.

Age group: All respondents were between 19-45 years old, with a mean of age 28.1 for both MSM and TGW. The youngest MSM participant was 19, and the oldest was 43. Similarly, the youngest TGW was 19, and the oldest was 45.

Figure 2: Demographic information of participants

1. Level of CAB-LA interest among Ex-PrEP users

Ex-PrEP users were invited to express their PrEP experience, views, and interest in CAB-LA during the discussion of the benefits and challenges of CAB-LA PrEP. Most ex-PrEP users still consider PrEP an essential method for HIV prevention. However, they dropped PrEP because of challenges, health issues, and risk profile changes, e.g., having a regular partner, being married, and being no longer at-risk.

All MSM and TGW ex-PrEP users were very interested in CAB-LA if available in Cambodia.

> ***"… I stopped using PrEP because of its side effects, so I will try CAB-LA if available. Because CAB-LA seems to have fewer side effects and no need to take daily like PrEP pill." Said by ex-PrEP user MSM.***
>
> ***"… I will use CAB-LA if it presents here, only one injection, but it can prevent me from HIV for almost two months". Said by ex-PrEP user TG.***

Some ex-PrEP users reported abuse when other people saw them taking daily PrEP. Some mentioned that friends and family were confused when they learned they were taking HIV medicine. Others mentioned that they had challenges bringing the pills along when they had trips or work.

> ***"… I am sharing a room with my friends, and they blamed me when they saw I take daily PrEP and they noticed that I am under HIV treatment,". said ex-PrEP user TG.***
>
> ***"… I had some challenges taking the PrEP pill because I needed to hide from my family and friends. Normally, I take PrEP at 9 p.m. before I go to bed. Sometimes, I missed taking the pill when I had an event outside or a trip to the province" By a TG.***
>
> ***"…I feel a stomachache after you used PrEP for a while." by ex-PrEP user MSM.***
>
> ***"… I notify that CAB-LA is a good option for us because nobody knows our status if we do not share it with them," said ex-PrEP user MSM.***

Most ex-PrEP users felt that CAB-LA would be much easier than PrEP pills. Because they will get the injection only every two months, they thought drug side effects might happen only with the first injection, while the pill had side effects every time, they took it. Ex-PrEP users also mentioned there would be better confidentiality if they take CAB-LA because they will not take the pill daily and must visit the health facility every two months.

Most participants felt ex-PrEP users would return to PrEP and try the CAB-LA like them because most ex-PrEP users had the same challenges and issues before they decided to drop PrEP.

> ***"… I am confident that many ex-PrEP users will return and enroll in the CAB-LA program because it is a great option for at-risk populations like ours." TG ex-PrEP user***
>
> ***"… I will try to participate in the CAB-LA program if possible in our country." MSM ex-PrEP user***
>
> ***"… if it is available (CAB-LA), it would be great for the user because there is no need to focus on daily pill taking. ….In addition, it has a long period of HIV prevention." MSM ex-PrEP user***

A few respondents said they would not use CAB-LA even if it were available in Cambodia. They said they would still use oral PrEP and condoms because they think PrEP and CAB-LA will have the same effect. PrEP is already an excellent choice to prevent HIV infection, prompting them to use the PrEP + condom combination.

Some ex-user respondents mentioned they are still uncertain about CAB-LA because they know little about it. They wondered if an injectable drug may have more risk than pills. They suggest the Ministry of Health develop educational materials to explain the efficacy of CAB-LA and its side effects based on World Health Organization (WHO) guidance.

> ***"…. I had some concerns because it seemed unclear, and there was no detailed information from CAB-LA. I need to explore more about CAB-LA before I decide to use it. In addition, CAB-LA should be endorsed by the Ministry of Health of Cambodia or a big organization like WHO." MSM ex-PrEP user***

"… more detailed information should come from the Ministry of Health (MoH) about the CAB-LA. It will be helpful for us to make the decision. Said by ex-PrEP user TGW.

Most ex-PrEP users were interested in CAB-LA and mentioned they may try it. Many ex-PrEP users were optimistic that other ex-PrEP user would reconsider PrEP and use CAB-LA because:

Ex-PrEP Users

- *CAB-LA eliminates daily pill taking.*
- *The CAB-LA user needs to visit health facility only once per two months, which allows a greater degree of confidentiality, and lessens stigma and opportunity for discrimination.*
- *Ex-PrEP MSM and TGW users feel CAB-LA may have fewer side effects compared to the PrEP pill and may be confined to the first week after the injection only.*
- *CAB-LA is a better choice for anyone challenged by pill swallowing.*
- *CAB-LA may encourage the PrEP dropouts to return to PrEP if they continue to be at high risk.*

2. Level of CAB-LA interest among Current PrEP users

Current PrEP users shared many challenges and PrEP side effects, but most MSM and TGW continue to use PrEP because they are at risk for HIV transmission. They mentioned many challenges, including pill swallowing, drug side effects including stomachache, dizziness, vomiting, exhaustion, missing doses, hiding PrEP drugs from friends and family, time management, getting to the clinic for refills, and other complaints. They were bothered by the need to hide their taking PrEP from family members or friends because of personal abuse, and stigma and discrimination from other people around them were all issues.

Nine of 10 current users mentioned that they would try CAB-LA instead of the PrEP pill if they had a choice.

"I think CAB-LA is the best option for a sexually active population group like ours," said a current TG.

"… only one injection can protect us for two months, and there is no need to always bring PrEP medicine with us". MSM and TG were raised in the group discussion.

"I feel CAB-LA offers me privacy because nobody will know my CAB-LA use. I am very interested in learning more." TGW user and other participants in group discussion

All participants mentioned that they have missed taking pills sometimes, especially when traveling, because they don't bring the medication or try to hide it from others traveling with them. Some reported they have been blamed or gossiped about by friends and colleagues who saw them taking medicine and thought it was HIV treatment.

"… normally I take PrEP at 9:30 PM before I go to bed because I cannot take the pill in front of my family members, … they did not know I am using PrEP". Said by a TG.

"… I have missed taking pills some days, especially during traveling to province or hometown," was raised by some of MSM and TG in a group discussion.

"… I was blamed by my roommate when they saw me take PrEP pills. They said I am PLHIV and taking an ARV drug. I feel not good, and sometimes I want to drop PrEP"—shared by a TG.

Most participants agreed that CAB-LA offers more privacy to users; while the user needs to visit a health facility bi-monthly for injections, there are no bags of pills or daily pill taking. The CAB-LA user will be more at ease as no one around them will not know about their CAB-LA injections.

"… only one injection, then it can prevent us for two months, and no need to bring the medicine like PrEP". Both MSM and TG were raised in the group discussion.

"It offers much more privacy because nobody knows our status taking CAB-LA. I am interested," Said a TG, followed by another participant.

Some participants, however, also felt challenged by the health facility visits. CAB-LA and PrEP require visiting a health facility every two or three months. Others were worried about costs. Often, there are high fees for injections. Some participants mentioned that they are willing to pay for CAB-LA injection if it is affordable (low price, 5.00 USD to 10.00 USD), but others, though interested in CAB-LA, may need help paying.

"I am interested and will try to use CAB-LA if it is available in our country, even if I need to pay some money." Said an MSM.

"… I think I can pay if the price is lower than 10 US dollars per dose," Said a TG, followed by another group discussion member.

"There are some challenges for us to pay, so I suggest to the national program to provide free of charge like PrEP pill," said an MSM followed by another group member.

"I am not sure about the price of CAB-LA, but it should be free like existing PrEP," a group discussion member mentioned.

"Based on our experience of PrEP implementation, CAB-LA should be free because most MSM and TG did not have money to pay for the service, except high-class MSM or TG." Raised by PrEP implementor.

Most participants agreed that CAB-LA offers more privacy for users. One injection can prevent HIV transmission more than two months.

Most participants mentioned that they could not contribute any payment, and they suggested it should be provided free of charge like PrEP pills. A few (1/20) were willing to contribute at very low cost - maybe around $5.00 to $10.00 per injection.

Current PrEP

- *Most participants agreed that CAB-LA offers more privacy for users. One injection can prevent HIV transmission more than two months.*
- *Most participants mentioned that they could not contribute any payment.*
- *A few (1/20) were willing to contribute at very low cost - maybe around $5.00 to $10.00 per injection.*

3. Level of CAB-LA interest among None PrEP users.

When we discussed PrEP and CAB-LA with individuals who had never taken PrEP, very few of them had heard about PrEP or CAB-LA, though most were familiar with HIV testing. Comprehensive information on HIV and PrEP was shared with this group, and they felt both oral PrEP and CAB-LA injections would be helpful to the population at risk to prevent HIV transmission. They could not compare or comment on PrEP and CAB-LA because they had no experience or more knowledge about these medicines and programs. After information sharing and discussion, they all mentioned they would choose CAB-LA if they had the option.

> ***"…based on the information shared by the team, I am interested in CAB-LA. It has many benefits if compared to the PrEP pill. We inject once, which can prevent us from HIV for almost two months. Moreover, we will get fewer side effects from the drug and no need to take the pill daily…". Raised by a TG.***

Based on information shared, some non-users considered trying CAB-LA themselves. Most also concerned about the price of CAB-LA (based on the current price CAB-LA - very expensive).

Very few had heard about PrEP and none had heard about CAB-LA. Comprehensive information on CAB-LA was shared with this group and some felt that the main reasons KP should select CAB-LA include:

- *CAB-LA need to inject only once per month or once per two months. So, it is very helpful user to visit health facility.*
- *CAB-LA has long-term infect in the human body, mean they had one injection, but it can prevent one or two months.*
- *The user no need to take daily pill, which it can make user boring and miss to take pill in someday.*
- *Maybe less of side effect if they use CAB-LA, but it will challenge for whom afraid needle.*

4. CAB-LA and Providers and Stakeholders

Healthcare providers and stakeholders are very interested in CAB-LA implementation in Cambodia. Most feel that CAB-LA can fill the PrEP gaps, especially for PrEP dropouts and others who may be uncertain about HIV prevention with pills and condoms. Creating more choices for the KP is the best approach to encourage them to participate in the HIV prevention program.

> ***"… I optimistic CAB-LA is a good approach to filling the gap of KP did not use PrEP and encourage the client who drops PrEP to come back into the program"—healthcare provider.***

> ***"… Currently, some PrEP clients changed daily to ED PrEP. It seems they are bored with daily PrEP. So, if CAB-LA is available in Cambodia, I strongly agree that most of KP will be interested, and some PrEP dropout clients will come back to join the program".***

Almost all participants (MSM, TG, healthcare providers, and PrEP implementors) agree to provide CAB-LA at CBO DICs, referral hospitals, and health centers. Strengthening the capacity of healthcare workers to include the CAB-LA PrEP will be needed. Health facilities, including Chhouk Sar Clinic, Toul Kork Health Center, and NCHADS Clinic, can quickly implement and pull many clients to participate. The issue of where injections might be given

needs to be addressed, along with reducing the administrative documentation for CAB-LA implementation at sites.

> ***"Chouk Sar is an excellent model to integrate CAB-LA services while it was installed as a clinic. Moreover, Chhouk Sar is well known by KP as a healthcare provider.***
>
> ***"Based on my knowledge, only the cabinet was allowed for injection. So, I would like to recommend that the national program conduct an in-depth study about the facility installation to align with MoH policy or guidelines. In addition, I observed that Chouk Sar is a good facility to provide CAB-LA because it is linked to KP, and its capacity can apply CAB-LA". Raised by PrEP provider.***

Most MSM, TGW, and stakeholders consider that CBO DICs are the right places for KP to receive HIV prevention services, including CAB-LA. There are some challenges for CBO implementing the CAB-LA because it is an injectable drug. CBOs may need to register as cabinets. Based on the experience and lessons learned from PrEP activities, most KPs are interested in getting PrEP at CBO DICs rather than public facilities.

> ***"… Based on my experience, most KP consider taking the service at CBO rather than going to the public health facility, while they are willing to talk with OW (they are the same group, so they easy to talk to each other) than the public healthcare provider." Said the PrEP-NGO implementor.***
>
> ***"…I strongly agree (I can say 1000% agree) with the idea to set up CAB-LA at CBO. Except Toul Kork Health Center reaches man KP, other public health facilities are not very KP friendly." Said the PrEP-NGO implementor.***
>
> ***"…. I consider installing the CAB-LA at public health facilities rather than CBO because it is an injectable drug based on Cambodia's law." PrEP service provider***

For program implementation, NCHADS should develop a detailed SOP and CAB-LA guidelines aligned with MOH policy. Qualified healthcare providers may need to be hired to provide CAB-LA to the clients. All agree that CAB-LA should be integrated within the PrEP program for HIV transmission reduction.

Finally, healthcare providers and stakeholders are quite interested in providing CAB-L. Most providers were optimistic that CAB-LA could reduce PrEP dropout and be a great option for high-risk populations choosing between prevention options.

Almost all participants (MSM, TG, healthcare providers and PrEP implementors) agreed that CAB-LA should be provided both at CBO and public health facilities including referral hospitals and health centers. NCHADS will need to develop CAB-LA implementation SOP and guidelines aligned with MOH policy.

Key Points:

- *Make CAB-LA available at the facility and CBO (but not allow for self-injection.)*
- *The CAB-LA should be start with the NCHADS clinic, Tuol Kork, and Chhouk Sar clinic, and then roll-out to another facilities and CBO sites.*
- *Consider establishing cabinet at the CBO sites.*
- *Improvement and update the PrEP's SOP with including CAB-LA*
- *Develop the concrete eligible criteria for MSM and TGW recruitment, further the technical team need to discuss.*

Conclusion and Discussion

Cambodia hopes to eliminate HIV transmission by 2025. CAB-LA is a critical additional approach to the RGOC HIV strategic plan. WHO has also released a recommendation in July 2022 [10] to encourage low- and middle-income countries to include CAB-LA within their combination of PrEP programs.

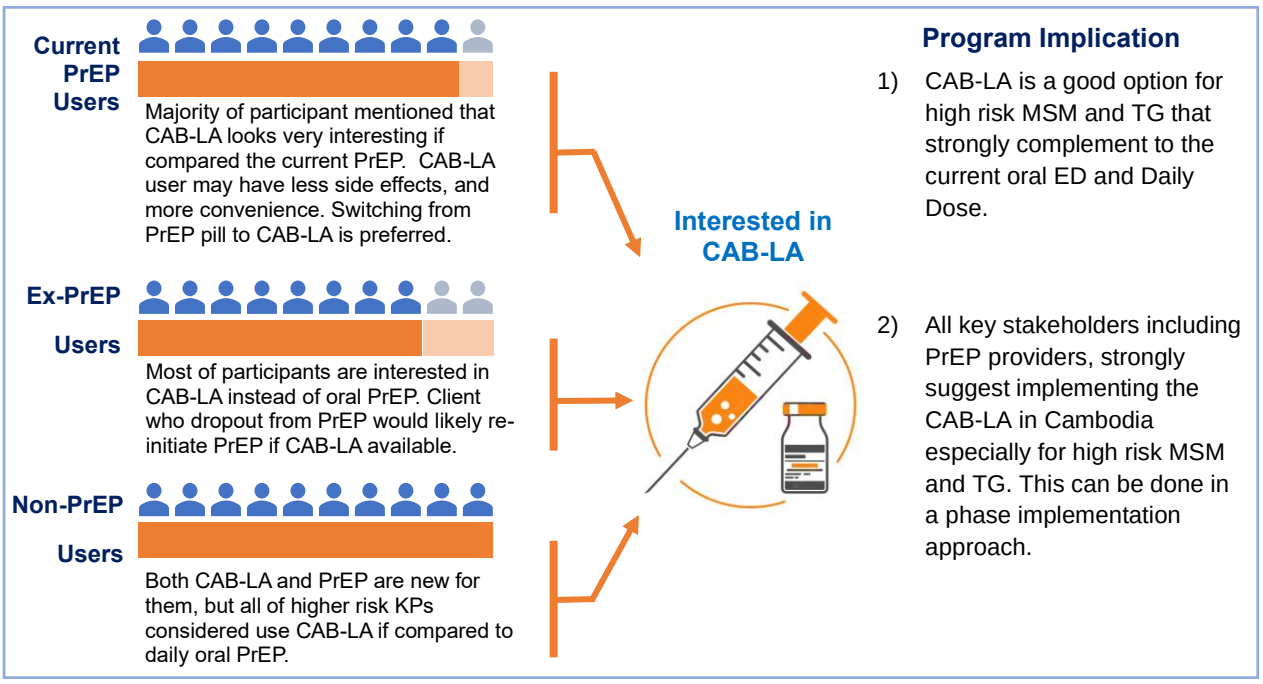
Ex-PrEP: Most participants mentioned returning to PrEP and trying to use CAB-LA instead of the PrEP pill.

Current PrEP User: Almost all mention that CAB-LA looks very interesting - fewer side effects and the user must inject only one every two months. If CAB-LA is available in Cambodia, they will switch from the PrEP pill to CAB-LA.

Never-PrEP: Both CAB-LA and Prepare new for them, and they know less about these medicines, but most of them would consider using CAB-LA compared to current oral PrEP.

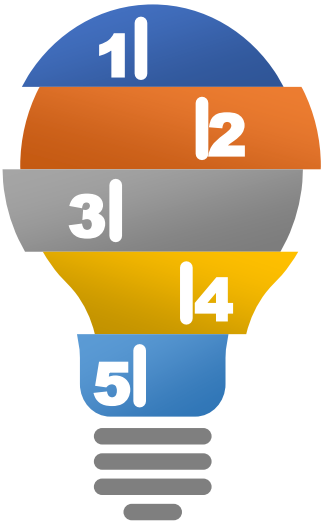
Implementers: CAB-LA could be a good option for the MSM and TG. They should have the choice (the user can switch between CAB-LA and PrEP). Regarding the assessment result, all PrEP implementors and stakeholders strongly agree to implement the CAB-LA in Cambodia.

Most felt that a CAB-LA demonstration project should start with three health facilities in Cambodia: NCHADS Clinic, Toul Kork HC, and Chhouk Sar Clinic. After a successful demonstration project, consider a wider rollout.



Recommendations

The national program should consider implementing a CAB-LA demonstration project for high-risk MSM and TG [10]. Most MSM and TG participating in the assessment are interested in trying CAB-LA if it is available in Cambodia. The program implementor recommends combining the CAB-LA and PrEP programs to move Cambodia forward and reach the goal of HIV elimination by 2025. KPs and healthcare workers are area optimistic that CAB-LA can encourage PrEP dropout clients to re-enroll in the program. There are some specific recommendations were proposed for the national program below:



- The national program should work with development partners to implement CAB-LA PrEP among high-risk populations especially MSM and TG.
- The national program should develop the detailed SOP and CAB-LA implementation guidelines together with key stakeholders and community for both public and CBO facilities.
- The national program should work closely with CBOs to implement the drop-in-center (DIC) for CAB-LA implementation.
- The national program address injection policy with MOH so that CAB-LA can be administered in sites like CBO DICs.
- Expand current PrEP awareness campaigns to include CAB-LA and develop the key messages to encourage PrEP dropout clients to return to the PrEP program taking advantage of CAB-LA.

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Annex1: Questionnaire-English

Exploration of future interest in CAB LA

For all:

1. Would MSM and TGW be interested in taking CAB LA if it became available?
2. If yes, why would CAB LA be more interesting?

   Probing questions: Don't have to take oral PrEP, fewer clinic visits, more extended protection, family, friends, or partners will not be able to see your pills or bottles, it will give more privacy and self-control on how to prevent myself from HIV infection?
3. If not, why would CAB LA be less attractive?

   Probing questions: people may be afraid of needles and injections, it is injected in the buttock, fear of pain at the injection site, you must be on it for two months, you can't stop in between, it may not be free of charge, and possible side-effects?
4. Would it be more interesting for new users, current users who may want to make a switch, those who stopped but may want to restart, and those who need to take PrEP? Why would that be the case (inquire for each MSM and TGW)?

Specific for TGW:

1. Why would CAB LA be more interesting?

   Probing question: Would it just be another injection next to the injections TGW takes for hormones?
2. Why would CAB LA be less attractive?

   Probing question: It may make hormone therapy less effective, or TGW may have silicone pads inserted in the buttock.

Specific for providers:

1. Why CAB LA can be successfully delivered at their clinic

   Probing questions: No need for urine and kidney monitoring, fewer clinic visits, more convenience for clients, continuous protection, etc.
2. Why CAB LA cannot be successfully delivered at their clinic

   Probing questions: It may burden service delivery extra; how can it be provided in the community two months after the last injection? If CAB LA is discontinued, there may be a high risk for HIV resistance mutations; CAB LA may be costly, cannot be immediate, has side-effects, etc.

THANK YOU FOR TAKING PART IN THESE DISCUSSIONS