

Meeting Report

SECOND NATIONAL CONSULTATION ON THE USE OF ANTIRETROVIRAL PRE-EXPOSURE PROPHYLAXIS (PREP) TO PREVENT HIV ACQUISITION



4 June 2018
Kuala Lumpur, Malaysia



**World Health
Organization**

Representative Office
for Malaysia, Brunei Darussalam,
and Singapore



**UNIVERSITY
OF MALAYA**

ceria
CENTRE OF EXCELLENCE FOR RESEARCH in AIDS
University of Malaya

World Health Organization Office of the Representative to Malaysia, Brunei Darussalam and Singapore
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MEETING REPORT

Second National Consultation on the Use of Antiretroviral Pre-exposure Prophylaxis (PrEP) to Prevent HIV Acquisition
Kuala Lumpur, Malaysia
4 June 2018

THE CENTRE OF EXCELLENCE FOR RESEARCH IN AIDS (CERIA),
UNIVERSITY OF MALAYA

MALAYSIAN AIDS COUNCIL (MAC)

OFFICE OF THE WORLD HEALTH ORGANIZATION REPRESENTATIVE TO MALAYSIA, BRUNEI
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NOTE

The views expressed in this report are those of the participants of the Second National Consultation on the Use of Antiretroviral Pre-exposure Prophylaxis (PrEP) to Prevent HIV Acquisition and do not necessarily reflect the policies of the conveners.

This report has been prepared by the Centre of Excellence for Research in AIDS (CERiA) and the Office of the World Health Organization Representative to Malaysia, Brunei Darussalam and Singapore for those who participated in the Second National Consultation on the Use of Antiretroviral Pre-exposure Prophylaxis (PrEP) to Prevent HIV Acquisition, held in Kuala Lumpur, Malaysia, on 4 June 2015.

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Keywords

Pre-Exposure Prophylaxis / Anti-Retroviral Agents – therapeutic use / Acquired immunodeficiency syndrome / HIV Infections - prevention and control

Summary

Oral pre-exposure prophylaxis of HIV infection (PrEP) is defined as the use of antiretroviral drugs by people who do not have HIV infection to prevent the acquisition of HIV. The World Health Organization (WHO) recommends that people at high risk of HIV acquisition should be offered PrEP.

The Second National Consultation on the Use of Antiretroviral Pre-exposure Prophylaxis (PrEP) to Prevent HIV Acquisition was held in Kuala Lumpur, Malaysia, on 4 June 2018. The consultation was convened by the Centre of Excellence for Research in AIDS (CERiA) at the University of Malaya, the Malaysian AIDS Council (MAC) and the World Health Organization (WHO) to follow up on recommendations by the first national PrEP consultation held in May 2016. The purpose was to stimulate further dialogue and discussion among various stakeholders involved in the implementation and scale up of PrEP in Malaysia and to learn from the experience of other Asian countries. Participants included members of community-based organizations (CBOs), infectious disease physicians, primary care doctors, researchers, Ministry of Health officials, PrEP users, civil society representatives and international experts.

The participants discussed: (i) PrEP initiatives in Malaysia, the Philippines and Thailand; (ii) emerging service delivery models for PrEP in Malaysia; (iii) updates on PrEP research in key populations in Malaysia; and (iv) PrEP implementation gaps and proposed ways to move forward. The following points emerged from the discussion:

- There has been progress towards PrEP implementation globally, including Asia and the Pacific, although initial progress has been slow. Malaysia, the Philippines and Thailand shared their experiences in introducing and expanding PrEP. Particular implementation and operational aspects of PrEP were highlighted. In addition, PrEP research among men who have sex with men (MSM) and transgender women (TGW) was presented.
- Number of small-scale PrEP services have begun in various parts of Malaysia, including two demonstration projects, five primary care clinics, four infectious disease clinics, two community-based organizations and six private clinics, that provide information regarding practical aspects of implementing PrEP and service delivery models.
- While PrEP research and pilot projects have been implemented in Thailand since 2010, the level and pace of expansion of PrEP are still too slow to curb the continued rise of HIV incidence among MSM. It is likely that PrEP for high-risk MSM and transgender individuals will be included in Thailand's universal health coverage (UHC) scheme by October 2018. It is estimated that there are around 6000 PrEP users in Thailand after three full years of implementation. Lessons from PrEP implementation projects in Thailand suggest that health services led by key populations are likely to be most effective. A specific plan, including how to support key population-led health services, is necessary for rapid national scale up.
- In the Philippines, PrEP is still in its infancy as it is being administered in one pilot project with 224 MSM on PrEP. Lessons learnt from the pilot project suggest that community-based models are best to reach, engage and retain MSM/TGW in HIV prevention programmes, recognizing the limited access and uptake of MSM/TGW in publicly funded primary care services. Promotion on social media with targeted advertising seem to reach key populations effectively.
- Implementation of PrEP in Malaysia and in the Asia and Pacific region has been limited due to a number of issues. Awareness is still low among health-care providers who are not trained in infectious diseases and the community at large. Stigma and discrimination in health care settings against MSM and other key populations is widespread. People in most communities do not know about PrEP or if they know, they do not perceive PrEP as an accessible HIV prevention intervention. PrEP services are not being accessed by TGW and sex workers. In addition, PrEP service providers are uncertain on how to best support adherence.

Conclusions

Issues specific to HIV epidemics in Asia and Pacific, particularly the high rates of HIV among MSM and other key population groups, make PrEP an important HIV prevention intervention in the region. Awareness about PrEP in the region is growing, even though PrEP is still in the early stages of scaling up implementation. Other than Thailand, there is a general lack of available data in the region to track the progress of PrEP implementation. In Malaysia the role of PrEP in the National Strategic Plan for Ending AIDS 2016–2030 is not well-defined. There is an urgent need in Malaysia to include PrEP for high-risk individuals as an HIV prevention tool alongside condom use, as well as a need for systematic data collection and a progress monitoring tool. Although there are limited data on the cost-effectiveness of using PrEP at the population level, over the course of the meeting the consensus view was that PrEP cost-effectiveness studies would not be warranted or needed. The reasons include: (i) the decreasing cost of PrEP over time; (ii) generic PrEP drugs are available and produced in the region; and (iii) the availability of further generic drug competition might drive down the cost of PrEP.

Recommendations

1. HIV prevention programmes should include a combination of behavioural, biomedical and structural interventions, and these should operate in synergy across various sectors.
2. PrEP should be recommended as an additional HIV prevention intervention for individuals at high-risk for HIV acquisition.
3. The purpose of PrEP must remain on reducing HIV incidence, and concerns of risk compensation need to be addressed with all stakeholders.
4. For PrEP to achieve large-scale coverage to impact HIV incidence, greater collaboration, engagement, commitment and sensitization is necessary within the Ministry of Health on PrEP-related policies and guidance for all key populations.
5. Cost of PrEP is no longer a barrier as low-cost generic ARVs are available, yet the lack of information on the cost of PrEP is a barrier, as many potential clients perceive PrEP as a costly drug. The current differential pricing strategy in government and private sector pharmacies for PrEP creates misconceptions among potential users.
6. There should be clear and consistent messages around PrEP, supported by evidence, to both health-care providers and key populations to raise awareness about PrEP. In Malaysia, community advocacy and leadership should drive PrEP access.
7. Novel approaches integrating government, private and community sectors are crucial for the scale-up of PrEP. Primary care clinics with a key population case load are thought to be the best sites currently to deliver PrEP. While clinics led by key populations represent the most accessible service delivery model, regulatory and policy change will be required for this to be implemented and sustained outside research.
8. Systematic collection of information about PrEP awareness, acceptability and use in key population groups is required in Malaysia – as well as most other countries in the region – to understand PrEP needs and inform the introduction of PrEP in national strategic plans for ending AIDS.

1. Introduction

Oral pre-exposure prophylaxis of HIV infection – PrEP – is defined as the use of antiretroviral drugs (ARV) by people who do not have HIV infection to prevent the acquisition of HIV. The World Health Organization (WHO) recommends that people at substantial risk of HIV should be offered PrEP.

The Second National Consultation on the Use of Antiretroviral Pre-exposure Prophylaxis (PrEP) to Prevent HIV Acquisition was held on June 4, 2018 in Kuala Lumpur, Malaysia. It was a follow-up to the first national consultation on PrEP held in May 2016. A number of recommendations emerged over the course of the first national consultation meeting, with participants recommending: (i) meeting with key affected populations to explain PrEP and gather opinions and concerns; (ii) the development of a training module for general practitioners by the Malaysian Society of HIV Medicine (MASHM); (iii) that local data to be generated and shared with Ministry of Health; and (iv) community-based organizations (CBOs) be encouraged to lead a PrEP campaign for men who have sex with men (MSM). Following the first national consultation, a training module for general practitioners was developed by MASHM and preliminary local data have been generated and shared with the Ministry of Health. Although few CBOs started to promote PrEP, there was a lack of clear and consistent messages.

The second consultation was organized by the Centre of Excellence for Research in AIDS (CERiA) at the University of Malaya and the Malaysian AIDS Council (MAC), with support from the World Health Organization (WHO). The purpose was to stimulate further dialogue and discussion among various stakeholders involved in the implementation and scale up of PrEP in Malaysia and to learn from the experience of PrEP implementation in other Asian countries. National stakeholders include members of CBOs, infectious disease physicians, primary care doctors, researchers, Ministry of Health officials, PrEP users, civil society representatives and international experts.

1.2 Meeting Objectives

The objectives of the meeting were:

- to share PrEP initiatives undertaken by the various stakeholders
- to showcase success stories of PrEP implementation around the region
- to highlight emerging service delivery models of PrEP in Malaysia
- to present updates of PrEP research in key populations in Malaysia
- to discuss implementation gaps in PrEP implementation and to propose ways to move forward.

2. Proceedings

2.1 Opening session

UNAIDS Fast-Track, an approach that aims to end the AIDS epidemic by 2030; the 90–90–90 targets, which aim by 2020 to diagnose 90% of all HIV-positive people, provide antiretroviral therapy (ART) for 90% of those diagnosed, and achieve viral suppression for 90% of those treated; and the target of reducing the number of people acquiring HIV by 75% by 2020 (UNAIDS, 2014) all require an expanded and accelerated scale up of HIV treatment and a combination of biomedical, behavioural and structural HIV prevention approaches over the next few years. Using PrEP and antiretroviral (ARV) medicines for treatment contributes to these targets. In the opening session, Professor Adeeba Kamarulzaman, Dean, Faculty of Medicine, University of Malaya, and Vice-President of the Malaysian AIDS Council, noted the considerable progress in terms of global policy and planning; however, the professor emphasized that this progress has not yet translated into large-scale adoption of PrEP at the national level in countries like Malaysia, where access and uptake are of critical importance. In addition, Professor Kamarulzaman emphasized the following:

- (1) HIV prevention approaches must be targeted to young MSM as incidence rates are rising among young MSM in Malaysia.
- (2) Although initiatives are underway that will lead to earlier diagnosis of HIV infection, late presentation is still a major issue, especially among young MSM. Novel HIV prevention approaches, with young MSM as one of its major focuses, can help curb the HIV epidemic in MSM.

Dr Lo Ying-Ru, WHO Representative in Malaysia, Brunei Darussalam and Singapore, emphasized that low HIV treatment coverage and the increasing number of new HIV infections among MSM jeopardize universal health coverage (UHC) in Malaysia. Improving service coverage for both HIV prevention and treatment could curb the HIV epidemic among MSM and improve the UHC index in Malaysia (WHO, 2018).

2.2 PrEP initiatives, service delivery models and stories of successful implementation

2.2.1 Experience from Malaysia

The HIV epidemic in Malaysia is concentrated in key populations with 111 916 reported cases since 1986 and a prevalence rate of 0.45% in the general population as of 2016. The HIV epidemic in Malaysia is transitioning from one that was traditionally driven by injecting drug use to one driven by sexual transmission, especially between MSM (Bourne et al. 2017), among female sex workers (FSW), and transgender women (TGW), posing challenges in HIV prevention efforts (Ministry of Health, 2015). Table 1 summarizes the epidemiological profile of key populations in Malaysia.

Table 1. Epidemiology Profile of Key Populations

Key population	Estimated population size (2012)	HIV prevalence* (2012)	HIV prevalence* (2014)
People who inject drugs	170 000 ¹	18.9%	16.3%
Female sex workers	40 000 ²	4.2%	7.3 %
Transgender individuals	20 000 ²	4.8%	5.6 %
Men who have sex with men	173 000 ³	7.1%	8.9 %

The uptake of HIV testing among Malaysian MSM, FSWs and transgender (TG) individuals remains dismally low (Lim et al. 2017). Reports suggest only 40.9% of MSM and 46.7% of TG individuals tested in the past 12 months were aware of their results (Lim et al. 2017). In addition, condom promotion programmes are not reaching MSM at a sufficiently high level: rate of condom use during the most recent sexual activity among MSM was 56.7% while it was 81.2% among TG (UNGASS. 2015). Overall ART uptake remains low with only 37% of the infected population who are diagnosed being on treatment (Ministry of Health, 2017). Awareness about PrEP is still low among health-care providers who are not trained in infectious diseases and the community at large. Stigma and discrimination in health care settings against MSM and other key populations is widespread.

PrEP remains a very new intervention in Malaysia, and implementation has been very low (Zablotska et al. 2016). An online PrEP survey of Malaysian MSM reported a moderate level of willingness to use PrEP (Lim et al. 2017). Findings from a qualitative survey showed that a majority of Malaysian MSM acknowledged the role that PrEP could play in minimizing HIV acquisition (Bourne et al. 2017). Currently, PrEP services are available through two demonstration projects, five primary care clinics, four infectious diseases clinics, two CBOs and six private clinics in Malaysia. These service delivery outlets are being accessed by key populations.

Key points

1. In Malaysia the role of PrEP in the National Strategic Plan for Ending AIDS 2016–2030 is not well-defined. There is an urgent need to include PrEP for high-risk individuals as an HIV prevention tool alongside condom use, as well as a need for systematic data collection and a progress monitoring tool.
2. MSM in Malaysia reported a moderate level of willingness to use PrEP. Evidence suggests the need to increase demand and awareness of PrEP, and access to testing and treatment services for HIV and sexually transmitted infections (STIs) for MSM.
3. PrEP implementation barriers in Malaysia include poor knowledge about PrEP, limited access to PrEP, weak HIV prevention programmes for MSM and other key populations, and restrictive laws.
4. Clients are willing to take PrEP if delivered at an affordable price, although concerns were raised about differential pricing for serodiscordant women and MSM.
5. Although there is clear evidence that PrEP is effective in preventing HIV transmission, providers have concerns about safety, toxicity and efficacy.

Expansion of PrEP access will depend, to a considerable degree, on how it is prescribed and delivered. Currently, primary care clinics who already cater to patients from key populations are thought to be the best sites to deliver PrEP at low cost. Although key population-led clinics, such as those in Thailand, represent the most accessible service delivery model, they will require regulatory and policy changes to allow the ARV prescription. In addition, community advocacy and leadership need to drive PrEP access in Malaysia.

Apart from the demonstration projects, clients make out-of-pocket payments for PrEP services in private sector. Although there were concerns by consultation participants about price, the cost of PrEP should no longer be a barrier in Malaysia as generic tenofovir/emtricitabine (TDF/FTC) is available at Malaysian ringgit 35–180/month in private sector. The Malaysian Society for HIV Medicine (MASHM) expressed the need for involving general practitioners (private sector) in HIV prevention and treatment.

There is no systematic economic evaluation study to assess how much clients are willing to pay for PrEP services. Pharmaceutical companies foresee PrEP as a profitable venture in Malaysia, hence, the initial buy-in from pharmaceutical companies will benefit PrEP roll-out in Malaysia. Although the cost of PrEP should no longer be a barrier, drug price is a major policy- issue. A rapid scale-up of PrEP in Malaysia would require a some kind of subsidy from the Government.

2.2.2 Experience from the Philippines

The Philippines never experienced a generalized heterosexual HIV epidemic. The HIV prevalence in the general population has remained low (<0.1%). The country is considered a low-burden country in terms of HIV, yet it is among those countries with the fastest-growing number of newly reported HIV cases worldwide (Department of Health, The Philippines, 2017).

HIV cases among MSM increased more than 10-fold since 2010, with new HIV cases occurring among younger people. Among new HIV cases between 2010 and 2017, 81.0% were in MSM (DOH, 2017). The Philippines is among those Asian countries with the lowest documented rates of condom use, at 19–40% in key population groups (IHBSS, 2011–2015). Moreover, HIV testing rates remain very low with only an estimated 8% of young MSM of 15–17 years diagnosed and ART uptake remains low with only 32% of diagnosed cases receiving treatment in 2016 (Department of Health, The Philippines, 2017).

PrEP for HIV-negative MSM at high-risk for HIV acquisition has been introduced through one pilot project. The pilot project in Manila with 224 active clients, is evaluating community-based, peer-driven PrEP services for MSM and TGW. As unpaid volunteers play an active role in providing PrEP services, the unique partnership between community-based and Government-supported models suggests that it is feasible to “de-medicalize” PrEP services. PrEP is not yet a part of the Government procurement plan, and issues remain concerning PrEP expansion and financial sustainability. Although the pilot project demonstrated that the community-based model works, it is not yet known how to best scale up PrEP in the Philippines. The draft national ART guidelines will include support from the Government for PrEP.

Key points

1. The community-based model works for reaching MSM at high risk for HIV acquisition.
2. It is feasible to “de-medicalize” PrEP service delivery.
3. The best way to scale up PrEP in the Philippines is not yet known.
4. PrEP is not yet a part of the Government procurement plan.
5. Future expansion and sustainability of PrEP remains uncertain.

2.2.3 Experience from Thailand

While Thailand has had great success in curbing HIV transmission among the heterosexual population, it is now widely recognized that the epidemic spread among MSM and TGW (Colby et al. 2015). In 2014, Thailand included PrEP in its National Guidelines for HIV Prevention and Treatment. It subsequently established the first affordable, fee-based PrEP service, costing beneficiaries US\$1 per day (The Second Asia-Pacific Regional Consultation Report, 2018). Thailand, the first country in the Asia and Pacific region to host PrEP trials, currently has several PrEP demonstration and implementation projects led by the Government, nongovernmental organizations and community groups. The Thai Government is considering PrEP in its UHC scheme.

PrEP-30, a demonstration project, is the first affordable, fee-based PrEP service delivery model. It is led by the Thai Red Cross AIDS Research Centre (TRCARC) and offers PrEP through community-led and hospital-based services for both MSM and TG individuals (Zablotska 2016). The Princess PrEP project is the first key population-led PrEP initiative under royal patronage, and it aims to serve 1000 PrEP users annually for three years. Initially, Princess PrEP started with MSM and TG individuals, and recently it has been expanded to serve FSW and PWID. PrEP2Start is a Government-initiated PrEP scale-up programme to strengthen the public health system to provide PrEP in hospitals and health centres in seven provinces of Thailand. The PrEP2Start programme aims to provide PrEP to 750 MSM and TGW. In addition, there are several ongoing research-based programmes in Thailand. Although several PrEP service delivery models in Thailand are designed to cater to the needs of TGW and TG sex workers, the uptake among TGW remains low due to concerns about drug interactions between PrEP and hormone therapy (Zablotska 2016).

Overall, there is a general lack of available data about progress towards PrEP implementation in south-east Asian countries, except Thailand. As of January 2018, there are 6000 PrEP users in Thailand. This number is far behind Thailand’s national goal.

Key points

1. Thailand has included PrEP in its national guidelines since 2014.
2. Key population-led health services emerged as the most effective PrEP service delivery model in Thailand.
3. Hospital-based PrEP dispensing is ineffective.
4. The current rate of scale up is too slow to curb the epidemic.
5. There is no clear plan for rapid scale up, including for key population-led health services.
6. The Government considers to include PrEP for MSM and TGW into UHC from October 2018.
7. The uptake of PrEP services among TG individuals remains low.
8. Financing of drug costs, retention, the need for routine laboratory monitoring, and the lack of awareness about PrEP among at-risk groups pose challenges to the wider implementation of PrEP in Thailand.

2.3 Updates on PrEP research in key populations in Malaysia

2.3.1 PrEP research in men who have sex with men in Malaysia

Findings from a large mixed-method study to assess the willingness of MSM in Malaysia to use PrEP for HIV prevention were shared during the consultation. MSM continue to be disproportionately affected by HIV in Malaysia (Bourne et al. 2017, Lim et al. 2017). In general, Malaysian MSM are willing to use PrEP. They perceive PrEP as an additional level of protection, over and above the protection offered by condoms (Bourne et al. 2017). The study conducted by Lim et al. (2017) shows that 39% of the MSM participants were willing to take PrEP. Given that MSM are generally willing to use PrEP, it is important to mitigate the barriers to access PrEP, such as low awareness of PrEP, fear of side effects, poor perception of the HIV risk, cost, and concerns regarding long-term adherence and confidentiality. Education interventions to inform the target population about the efficacy and potential of PrEP are central to optimal PrEP utilization. As stigma and discrimination remain a key barrier to access PrEP, participants in the consultation suggested online purchase of PrEP. The findings from both the studies presented at the consultation (Bourne et al. 2017, Lim et al. 2017) show fear of being stigmatized and labelled as promiscuous by peers as the major barriers to access PrEP. The quantitative analysis conducted by Lim et al. (2017) reveals that 60% of participants are uncomfortable with physicians when it comes to disclosing their sexual behaviour. Only a small minority of men had learnt about PrEP from their physicians.

2.3.2 PrEP research among transgender individuals in Malaysia

Four studies to describe the current scenario of TGW in Malaysia were shared during the consultation. A study conducted among 199 TGW showed 83% were active sex workers, 42% had been tested for HIV in their lifetime, and 9% had been tested for HIV in last 12 months (Wickersham, 2017). A survey of 436 medical doctors at two university hospitals in greater Kuala Lumpur to evaluate physicians' attitudes towards TG patients found a high level of stigma towards TG individuals (Vijay, 2018). A survey of 374 TGW in Johor, Kelantan, Kuala Lumpur and Penang showed only 20.2% had previously heard of PrEP; however, over 90% reported being interested in taking PrEP and were willing to pay for PrEP (Wickersham, 2017). Willingness to use PrEP was low among TG individuals in higher age groups, those with a history of injecting drug use and those currently on hormone therapy. The study showed daily oral PrEP (83.1%) was overwhelmingly preferred to a bimonthly injectable PrEP formulation (16.9%). Among the respondents, only two participants reported having taken PrEP previously.

2.3.3 PrEP service delivery models in Malaysia

PrEP in Malaysia, is generally delivered through facility- and community-based delivery models, with prescription, delivery and administration as the central focus. While both models can serve as identification points for potential PrEP users, clients on PrEP in all service delivery points must meet minimum criteria. In general, government-led facilities dispense PrEP from an off-site private pharmacy, although on-site dispensing is available in certain service delivery points. Most

of the facility-based models incorporated PrEP delivery to their existing platforms, maximizing ART and PrEP synergies. For example, the University of Malaya Medical Centre (UMMC) is piloting an integrated PrEP service delivery model in an existing HIV treatment center. The programme works in collaboration with the Pink Triangle Foundation, a CBO, with clinics that provide HIV testing and prevention services to MSM. As part of its standard service package, the clinics offer referral services to UMMC for at-risk, HIV-negative MSM. Currently, all of the service delivery outlets are accessed by key populations, although there is a differential pricing structure for serodiscordant women and MSM.

2.3.4 Driving demand creation for PrEP in Malaysia

Demand creation and education is essential for broader PrEP roll-out in Malaysia. As PrEP users are diverse, CBOs at the consultation suggested generating interest through “targeted demand generation”, which follows the AIDA approach – Awareness, Interest, Desire and Action. PrEP demand-creation materials must be targeted to each key population group, with special considerations for young MSM, TG individuals and sex workers. Reasons for using PrEP vary widely and change over time, hence, PrEP marketing and communications plans should reflect the PrEP user perspective and context.

2.3.5 PrEP user testimonies

The use of PrEP can help reduce anxiety and provide greater peace of mind, according to PrEP users at the consultation. The users said they consider being on a PrEP regimen a good reminder to keep their bodies and minds healthy. For the PrEP users, the feeling of living a safer sex life outweighed the fear of possible side effects and drug resistance. In the implementation of PrEP programmes, necessary steps must be taken to ensure that PrEP is offered in a safe and friendly environment where health-related rights are respected and protected. There were concerns that PrEP services may add to the widespread stigma and discrimination that exists among some health-care workers in various health-care settings.

3. Conclusions and Recommendations

3.1 Conclusions

Issues specific to HIV epidemics in Asia and the Pacific, particularly the increasing incidence of HIV among MSM, make PrEP an important HIV prevention intervention in the region. Awareness about PrEP in the region is growing, even though PrEP is still in the early stages of implementation. Other than Thailand, there is a general lack of available data in the region to track the progress of PrEP implementation. In Malaysia, there are no systematic PrEP data available for a progress assessment. In addition, the role of PrEP in Malaysia's National Strategic Plan for Ending AIDS 2016–2030 is not well defined. Therefore, there is an urgent need in Malaysia to prioritize PrEP for high-risk individuals as an HIV prevention tool, alongside condoms, as well as a need for systematic data collection and a progress monitoring tool. Although there are limited data on the cost-effectiveness of using PrEP at the population level, over the course of the meeting the consensus view was that PrEP cost-effectiveness studies would not be warranted or needed. The reasons include: (i) the decreasing cost of PrEP over time; (ii) generic PrEP drugs are available and produced in the region; and (iii) the availability of further generic drug competition might drive down the cost of PrEP.

3.2. Recommendations

1. HIV prevention programmes should include a combination of behavioural, biomedical and structural interventions, and these should operate in synergy across various sectors.
2. PrEP should be recommended as an additional HIV prevention intervention for individuals at high-risk for HIV acquisition.
3. The purpose of PrEP must remain on reducing HIV incidence, and concerns of risk compensation need to be addressed with all stakeholders.
4. For PrEP to achieve large-scale coverage to impact HIV incidence, greater collaboration, engagement, commitment and sensitization is necessary within the Ministry of Health on PrEP-related policies and guidance for all key populations.
5. Cost of PrEP is no longer a barrier as low-cost generic ARVs are available, yet the lack of information on the cost of PrEP is a barrier, as many potential clients perceive PrEP as a costly drug. The current differential pricing strategy in government and private sector pharmacies for PrEP creates misconceptions among potential users.
6. There should be clear and consistent messages around PrEP, supported by evidence, to both health-care providers and key populations to raise awareness about PrEP. In Malaysia, community advocacy and leadership should drive PrEP access.
7. Novel approaches integrating government, private and community sectors are crucial for the scale-up of PrEP. Primary care clinics with a key population case load are thought to be the best sites currently to deliver PrEP. While clinics led by key populations represent the most accessible service delivery model, regulatory and policy change will be required for this to be implemented and sustained outside research.
8. Systematic collection of information about PrEP awareness, acceptability and use in key population groups is required in Malaysia – as well as most other countries in the region – to understand PrEP needs and inform the introduction of PrEP in national strategic plans for ending AIDS.

References

Bourne A, Cassolato M, Thuan Wei, CK, et al (2017). Willingness to use pre-exposure prophylaxis (PrEP) for HIV prevention among men who have sex with men (MSM) in Malaysia: findings from a qualitative study. *Journal of the International AIDS Society*, 20, 21899. Available at <http://doi.org/10.7448/IAS.20.1.21899>.

Colby D, Srithanaviboonchai K, Vanichseni S, et al (2015). HIV pre-exposure prophylaxis and health and community systems in the Global South: Thailand case study. *Journal of the International AIDS Society*, 18 (4 Suppl 3), 19953. doi:10.7448/IAS.18.4.19953,

Department of Health, Philippines (2017). Department of Health Website. Available at <https://www.doh.gov.ph/stat>.

Farr AC, Wilson DP (2010). An HIV epidemic is ready to emerge in the Philippines. *Journal of the International AIDS Society*, 13, 16. Available at <http://doi.org/10.1186/1758-2652-13-16>

Integrated HIV Behavioral and Serologic Surveillance (IHBSS, 2011–2015). Available at <https://www.aidsdatahub.org/2013-integrated-hiv-behavioral-and-serologic-surveillance>.

Lim SH, Mburu G, Bourne A, et al (2017). Willingness to use pre-exposure prophylaxis for HIV prevention among men who have sex with men in Malaysia: Findings from an online survey *Plos One*, 12(9), e0182838. Available at <http://doi.org/10.1371/journal.pone.0182838>

Ministry of Health. Malaysia (2015). Ending AIDS in Malaysia. Myth or Reality? Report prepared by HIV/STI Section, Disease Control Division, Ministry of Health.

Ministry of Health. Malaysia (2017). KKM Health Facts. Available at www.moh.gov.my/images/gallery/publications/HEALTHFACTS2017.

Reid G, Kamarulzaman A, Sran SK (2007). Malaysia and harm reduction: the challenges and responses. *Int J Drug Policy*. 2007 Mar;18:136-40.

The second Asia-pacific regional consultation on PrEP implementation (2018). Creating alternative demand for pre-exposure prophylaxis (PrEP). Meeting report. Bangkok: Thailand; January 16, 2018. Available at <https://www.prevention-trcarc.org/en/news/2-nd-Asia-Pacific-Regional-Consultation-on-PrEP-Implementation>.

UNAIDS (2014). 90-90-90 An ambitious treatment target to help end the AIDS epidemic. Available at <http://www.unaids.org/en/resources/documents/2014/90-90-90>.

UNGASS (2015). Data sheets. Available at <https://aidsdatahub.org/taxonomy/term/99>.

Vijay A, Earnshaw VA, Tee YC, et al (2018). Factors Associated with Medical Doctors' Intentions to Discriminate Against Transgender Patients in Kuala Lumpur, Malaysia. *LGBT Health*.

WHO (2018). UHC and SDG Country Profile 2018 Malaysia. Available at <http://iris.wpro.who.int/bitstream/handle/10665.1/14049/WPR-2018-DHS-010-mys-eng.pdf>

Wickersham JA, Gibson BA, Bazazi AR, Pillai V, Pedersen CJ, Meyer JP, El-Bassel N, Mayer KH, Kamarulzaman A, Altice FL. (2017). Prevalence of Human Immunodeficiency Virus and Sexually Transmitted Infections Among Cisgender and Transgender Women Sex Workers in Greater Kuala Lumpur, Malaysia: Results From a Respondent-Driven Sampling Study. *Sex Transm Dis*.

Zablotska I, Grulich AE, Phanuphak N, et al. PrEP implementation in the Asia-Pacific region: opportunities, implementation and barriers. (2016). *Journal of the International AIDS Society*, 19(7):21119. doi:10.7448/IAS.19.7.21119.

Annexes

Annex 1. Programme

Time	Topic	Speaker
08:30–09:00	Registration	
09:00–09:10	Welcome Remarks Opening Remarks	Professor Adeeba Kamarulzaman, Dean Faculty of Medicine, University of Malaya and Vice President Malaysian AIDS Council Dr Ying-Ru Lo, WHO Representative in Malaysia, Brunei Darussalam and Singapore
09:10–09:20	Group photo	
09:20–09:50	Where we are with PrEP implementation in Malaysia	Dr Iskandar Azwa, CERiA & Faculty of Medicine, University Of Malaya
09:50–10:20	Project PrEPPY: Piloting community-based and peer driven HIV pre-exposure prophylaxis for MSM and transgender women in the Philippines	Dr Rossana Ditango, Research Institute for Tropical Medicine, Ministry of Health and Danvic Rosario, LoveYourself, Philippines
10:20–10:50	The Thai experience of PrEP implementation and scale up	Dr Nittaya Phanuphak, Thai Red Cross AIDS Research Centre, Thailand
10:50–11:10	COFFEE BREAK	
11:10–11:40	Updates on PrEP Research in Key Populations: MSM	Dr Howie Lim, Faculty of Medicine, University of Malaya Mohd Akbar Abdul Halim, My PrEP Study
11:40–12:10	Updates on PrEP Research in Key populations: TG	Dr Jeffrey Wickersham, CERiA & Division of Infectious Diseases, School of Medicine, Yale University
12:10–12:50	Debate – Linking PrEP and the treatment cascade	Dr Frits Van Griensven, Thai Red Cross AIDS Research Centre Panel: Frits van Griensven, Danvic Rosario, Tamayanthy Kurusamy, Dr Ying-Ru Lo
12.50–14:00	LUNCH BREAK	

Time	Topic	Speaker
14:00–15:00	PrEP Service Delivery Models: ID Clinic Primary Care CBO ID Clinic Private sector	Dr Chow Ting Soo, Hospital Pulau Pinang Dr Nurul Aida Saleh, KK Kuala Lumpur Engie Ng Lai Kin , Penang Family Health Development Association Nishaan Raman, UMMC Dr Andrew Yap, Red Clinic
15:00–15:40	Policy & Societies: Prevention of sexual transmission of HIV – Role of biomedical prevention Role of Civil Society Role of Ministry of Health Role of MASHM	Tamayanthy Kurusamy, MAC Dr Mohd Nasir Abdul Aziz, HIV/STI Sector, MOH Dr Suresh Kumar, MASHM
15:40–16:20	Creating Demand for PrEP: Initiatives from the Community: Community Health Care Clinic, PT Foundation PrEP user testimonials	Raymond Tai & Frederick Pour, PT Foundation
16:20–16:40	COFFEE BREAK	
16:40–17:20	Scaling Up PrEP: Challenges, Implementation Gaps (Panel discussion)	Moderator: Dr Iskandar Azwa and Dr Frits Van Griensven Panel: Ministry of Health: Dr Nasir Health Care Provider: Dr Chow Ting Soo CBO: Raymond Tai PrEP user Pharma: Mr Lee, Medispec Researcher: Dr Jeffrey Wickersham
17:20–17:30	Closing: Summary and Next Steps for PrEP in Malaysia	Yusrul Hakim/Dr Iskandar Azwa

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