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Demedicalisation of HIV interventions to end HIV in the Asia-Pacific

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Abstract. Despite the challenges to the HIV response in the Asia–Pacific, a demedicalisation of HIV intervention has been demonstrated to be an important strategy to maximise the uptake of HIV prevention tools among key populations in this region. Demedicalisation of HIV interventions translates medical discourse and shifts the paradigm from a disease-focused to a people-centred approach. It also recognises real-life experiences of key populations in the HIV response by empowering them to voice their needs and be at the forefront of the epidemic control. We further categorise a demedicalisation of people living with HIV; and (3) the decentralisation of healthcare services. This article reviewed the demedicalisation framework by looking at the HIV intervention examples from countries in the Asia–Pacific, which included: (1) a study on drug–drug interaction between pre-exposure prophylaxis and feminising hormone treatment for transgender women; (2) the roles of key population-led health services; and (3) certification of key population lay providers.

Keywords: Asia, Asia–Pacific region, demedicalisation, decentralisation, demystification, destigmatisation, epidemic, HIV/AIDS, HIV prevention, key populations, vulnerable populations.

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Introduction

Despite the modest 9% decline in new HIV infections in Asia and the Pacific since 2010, more than three-quarters of new HIV infections in Asia and the Pacific are among key populations (KPs),¹ which include men who have sex with men (MSM), transgender women (TGW), sex workers and their sexual partners. These KPs are repeatedly marginalised in HIV responses in many Asian contexts due to criminalisation of same-sex relationships, human rights violations towards sexual orientation and gender identity, as well as the lack of appropriate health care available in conventional HIV service provision.²

In Asia and the Pacific, ~30% of new HIV infections occurred among MSM in 2018.¹ High HIV prevalence among MSM was observed in Thailand (26.2%), Indonesia (25.8%), Malaysia (21.6%) and Vietnam (12.2%).³ There were 16 countries in the region criminalising same-sex sexual

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activities between consenting male adults. In the countries with state-sponsored punitive laws criminalising same-sex relationship such as Bangladesh, Pakistan, Papua New Guinea and Sri Lanka, fewer than 60% of MSM consistently used condoms.³

In addition, available data have showed that transgender people, referred to as persons who identify themselves in a different gender than that assigned to them at birth, were disproportionately affected by HIV.⁴ High HIV prevalence among TGW was reported in certain cities and geographic locations in the region, including Jakarta (34%), Kuala Lumpur (23.9%), Bangkok (17.3) and Cebu City (11.8%).⁵ Despite the increased HIV vulnerability, relatively few HIV services and programs were made available for transgender communities in these cities. Transgender women tended to be conflated with MSM programming for HIV, which overlooks transgender women's unique health needs.⁴ All of these barriers can translate into poor health outcomes for members of KPs. HIV testing coverage among transgender people was relatively low in many countries, including the Philippines (15%), Pakistan (29%) and Bangladesh (35%).

Punitive laws against sex work are enforced in 18 countries in Asia and the Pacific.⁶ The institutionalised stigma has resulted in fears of criminalisation and discrimination when accessing public health services. A low proportion of comprehensive HIV knowledge was found among female sex workers (FSW) in Afghanistan, Lao People's Democratic Republic and Nepal,⁷ making evident the urgent need for HIV literacy in this population.

Despite these challenges to the HIV response in the Asia–Pacific, a demedicalisation approach has been demonstrated in HIV interventions in certain settings in the region. This demedicalisation framework provides an opportunity to bring HIV and related health services closer to the most vulnerable KPs in the region.

Demedicalisation of HIV interventions

A demedicalisation approach translates medical discourse and shifts the paradigm from a disease-focused to a peoplecentred approach.^{2,8,9} Demedicalisation also recognises reallife experience of KPs in the HIV response by empowering them to voice their needs and be at the forefront of the epidemic control. Key populations have the ability to design service packages most suitable for their lifestyles and to deliver quality services collaterally through equal partnership with healthcare providers.^{10,11}

We further define a demedicalisation approach in HIV interventions as incorporating three fundamental elements derived from the principles mentioned above: (1) the demystification of clinical or medical concerns; (2) the destigmatisation of people living with and vulnerable to HIV; and (3) the decentralisation of healthcare services.

First, the demystification of any clinical or medical concerns raised by the community affected by the HIV epidemic can create knowledge and understanding, enhance health-seeking behaviours, and facilitate access to HIV services. Cultural beliefs and social norms associated with health may hinder access to health care. Therefore, healthcare providers should listen to the community's concerns and engage the community in meaningful ways to address their health concerns and use the opportunity to myth-bust any clinical issues.

Second, destignatisation has important implications for the health of stigmatised groups.¹² Even in places where HIV interventions exist, stigma and discrimination among healthcare providers towards same-sex behaviours, transgender identity, transactional sex and early sexual debut remains a major barrier for KPs to access HIV prevention, care and treatment. Destigmatising people accessing HIV services can lead to positive health outcomes for KPs. This concept challenges the norms and requires accurate knowledge and non-judgmental attitudes towards those views.

Lastly, decentralisation in health believes in meaningfully increasing the roles of the communities and KPs directly affected by the diseases, so they can provide different levels of health services. Decentralisation in health may extend to task-shifting the scope of practice of community health workers (often called non-professional health workers or lay providers), including people living with HIV. This can enable them to assume some tasks previously undertaken by traditionally trained cadres (e.g. nurses and, non-physician clinicians and medical doctors).¹³

This paper will highlight best practices for these three fundamental elements of demedicalisation in HIV interventions.

Demystifying drug-drug interaction between pre-exposure prophylaxis and gender-affirming hormone treatment among transgender women

In many transgender communities, drug-drug interaction between gender-affirming hormones and antiretroviral agents used as pre-exposure prophylaxis (PrEP) remains a concern.¹⁴ The Tangerine Clinic, a transgender-led health centre located at the Thai Red Cross AIDS Research Centre (TRCARC), found it challenging to increase access to PrEP among TGW in the first year of the clinic opening. Most TGW prioritised gender-affirming hormones over HIV services. Through a range of consultations with the transgender community, together with clinicians, researchers and funders, it was agreed upon that there was a tremendous need to conduct a research study to measure drug-drug interaction between feminising hormones and PrEP among TGW. As a result, researchers initiated the iFACT study (Interaction between the use of Feminising hormone therapy and Antiretroviral agents Concomitantly among Transgender women) to evaluate drug-drug interactions between feminising hormone therapy and PrEP among TGW. The research results from the iFACT study demonstrated that there were no significant changes in blood E2 exposure in the presence of PrEP, suggesting that TGW can use feminising hormone treatment (FHT) and PrEP concurrently without the concerns that PrEP will diminish the feminising effects from FHT.¹⁵

The iFACT study team organised a meeting to disseminate the research findings to transgender participants, transgender community representatives, healthcare providers, funders and policy makers. This consultative process facilitated the demystification of concerns around PrEP and gender-affirming hormones among transgender communities and healthcare providers.

In addition, key clinical messages were translated into simplified Thai language and shared among transgender counsellors, nurses and clinicians at the Tangerine Clinic in order to have accurate information when providing counselling to transgender clients. After the study completion and data dissemination, transgender PrEP users increased from 28 between 2015 and 2016 to 314 between 2018 and 2019 at the Tangerine Clinic. This success story highlights the importance of debunking the clinical concerns related to HIV treatments in order to expand the uptake of PrEP in transgender populations.

Destigmatising PrEP through KP-led health services

Pre-exposure prophylaxis is proven to be effective in reducing HIV acquisition and has resulted in drastic

decreases in new HIV infections when implemented as part of a combination–prevention strategy.^{16–18} In 2016, the Joint United Nations Programme on HIV/AIDS (UNAIDS) called for a rapid scale up of HIV prevention services and set the goal of having 3 million people on PrEP by 2020.¹⁹ However, implementation, scale-up, and uptake of PrEP globally remains slow, with 500 000-cumulative PrEP users as of April 2020, ~10% of which are in the Asia–Pacific Region.²⁰

Globally, inconvenient locations and perceived stigma due to homophobia or transphobia from healthcare providers have been shown to be strong barriers to accessing PrEP and HIV-related services.^{21,22} Across the region, KPs have expressed concerns about the stigma associated with accessing PrEP services from public healthcare providers, and overwhelmingly prefer to access PrEP services from community-based organisations, pharmacies, vending machines or through online assessment and delivery due to convenience and anonymity, rather than hospital services or antiretroviral therapy (ART) clinics.^{19,23–28} Community involvement and leadership from KPs such as MSM, TGW, men who have sex with women and transgender sex workers is vital in the implementation of PrEP programs.²⁹ This suggests that for the successful scaling up and rolling out of PrEP, the reduction of PrEP-associated stigma is essential but not yet sufficient. Ensuring that PrEP is delivered to those who need it the most by utilising innovative approaches to PrEP service delivery and out-ofthe-box thinking is imperative to increasing access to and uptake of PrEP.

Demedicalised, differentiated models of PrEP service delivery are feasible, cost-efficient, and strongly preferred by members of KPs in the Asia–Pacific region.³⁰ The three

countries in the region with the highest number of cumulative PrEP users (Australia 26 000–27 000, Thailand 12 713, and Vietnam 9500–10 000) are all using demedicalised strategies for PrEP service provision.²⁰

In Australia, a nurse-led approach to PrEP provision has been adopted and has proved instrumental in reaching the accelerated achievement of high coverage rates, with a significant reduction in new HIV diagnoses as a result.^{18,31} Although this model is not a truly demedicalised, KP-led, approach to PrEP service delivery, it has demonstrated a novel and non-conventional model that task-shifted traditional physician roles – such as clinical assessment, ordering of tests and supplying PrEP – to nurses, and which ultimately led to the rapid roll-out and uptake of PrEP under relatively resource-constrained circumstances.

In Thailand, the PrEP program contributing to the highest proportion of clients accessing PrEP is 'Princess PrEP,' a KPled PrEP program that is part of the KP-led health services (KPLHS) model and is implemented in six priority provinces in the country.¹⁰ Through KPLHS, lay providers, who themselves are members of the communities they serve, are trained and certified to enable them to provide high-quality and non-judgemental HIV services along the HIV cascade in stigmaand discrimination-free community-based organisations.³² Even though only ~9% of those at substantial risk for HIV in Thailand are currently using PrEP, KP-led PrEP accounts for 58% of these PrEP users, compared with 25% through a fee-based PrEP service (PrEP-15) and 17% through the government PrEP program (Fig. 1).^{33,34} The success of the Princess PrEP program has resulted in the inclusion of PrEP under the universal health coverage (UHC) scheme in Thailand.^{35,36} A total of 72%



Fig. 1. Cumulative number of Thai PrEP users by PrEP program, against the national PrEP target.

of PrEP provided under UHC is delivered through Princess PrEP, indicating the continuing instrumental role of KP-led PrEP in Thailand.

In Vietnam, the first PrEP pilot, Prepped for PrEP (P4P), was launched in 2017. A December 2016 survey among 799 MSM and TGW identified that 71% of MSM and TGW preferred that PrEP be delivered through a KP-led organisation. In response, the Vietnam Administration for AIDS Control (VAAC), KP leaders and the United States Agency for International Development (USAID)/PATH Healthy Markets team established a partnership between KP community-based organisations (CBOs) and PrEP clinics. During P4P, 1069 MSM and 62 TGW enrolled in PrEP, and among them, 94.6% opted for services at one of the three KP clinics. Findings from the program indicated a demand among KPs for differentiated service delivery models to ensure access to a variety of options for PrEP services in public and private sectors.³⁷ This has led to the incorporation of these models in the national PrEP program, which was launched in 2018 in 11 provinces and expanded to an additional 16 provinces in 2019, with more than 13000 people ever on PrEP, of which 8381 (65%) have been served through USAID/PATH Healthy Markets partner clinics in Hanoi, Ho Chi Minh City, and Dong Nai province (Fig. 2). The majority of these clients (72%) have enrolled in PrEP at KP-owned and led clinics.

Another example of a successful community-led PrEP program is Ashodaya, a CBO in Mysore, India, which adopted community-led approaches that have resulted in reductions in HIV prevalence and sexually transmissible infections (STIs), and reduced violence among sex workers.³⁸ These community-led approaches were subsequently utilised in their PrEP demonstration project among FSW.³⁹ Existing outreach strategies in which peer outreach workers make contact with members of their sex work networks in the field at least once every 2 weeks, were

utilised to provide information about PrEP, enrol participants into the study, dispense PrEP per individualised dispensation plans, and provide individualised adherence support strategies. Findings from the study underscore that CBOs can effectively deliver PrEP to their communities with extremely high levels of retention and adherence.

KP-led organisations in Asia and the Pacific are clearly not only successful, but essential in the delivery of PrEP services to those most in need, and sustainability of these organisations through increased domestic financing and the establishment of pathways for integration into national health programs need to be prioritised to continue and build upon these achievements.⁴⁰

Decentralising HIV services through KP-led HIV lay testing and self-testing

The World Health Organization (WHO) approved guidelines for HIV lay testing or 'test for triage' using a single rapid diagnostic test to screen for HIV and then refer those that tested HIV reactive to a facility for a HIV diagnosis and treatment in 2015.⁴¹ Guidelines for HIV self-testing (HIVST) followed in 2016.²⁸ Despite these global guidelines and the significant evidence that supports country-level adoption of these approaches, in 2019, only six countries in Asia–Pacific region had adopted policies that were supportive of HIV lay testing (Australia, Cambodia, Laos, Taiwan, Thailand and Vietnam) and five of HIVST (Australia, China, Taiwan, Thailand and Vietnam).^{30,42,43}

When Vietnam adopted the UNAIDS 90–90–90 goals by 2020 in December 2014, an opportunity was created to explore new HIV testing modalities.⁴⁴ Up until the end of 2015, HIV testing services were only available in public facilities and the HIV positivity rate in these facilities declined from 12.6% in 2007 to 2.3% in 2015, 1.6% in 2016, and 1.5% in 2017. Annual surveillance measured consistently low levels of HIV testing



Fig. 2. PrEP uptake by type of clinic and by population in USAID/PATH Healthy Markets-supported sites. SDC, serodiscordant couples.

reported by people who inject drugs (PWID), MSM, and FSW in the past 12 months.³⁷ Previous studies had measured several barriers faced by KPs in accessing facility-based HIV testing, including worries related to confidentiality, fears of stigma and discrimination and lack of convenience. Studies among MSM in Vietnam indicated that MSM preferred HIV testing services be offered in the community by non-public sector clinics or MSM-led CBOs.⁴⁵

In light of these barriers to KP uptake of standard facilitybased testing, the VAAC, the USAID/PATH Healthy Markets project and the WHO worked closely together to define additional and differentiated HIV services that could be offered in the community by lay KP healthcare workers. In October 2015, the VAAC issued approval for a 2-year community-based HIV testing pilot for six provinces (Hanoi, Ho Chi Minh City, Thanh Hoa, Dien Bien, Nghe An and Can Tho) that represented diverse geographies, resources and populations living with and affected by HIV. The model included a 3.5-day training where KP CBO staff and peer educators learned to use a single HIV rapid diagnostic test (Alere Determine® (Alere Medical Co., Ltd.) HIV-1/2 antibody) and provide clear information to clients about what a reactive or non-reactive result meant and how to provide active referral for confirmatory testing and ART enrolment. HIV lay testing was designed to be flexible and offered wherever preferred by the client: in the CBO office, client's home, or any other location.

HIVST was also introduced as part of the VAAC community-based testing pilot starting in May 2016. Services were offered at KP CBO offices, where clients were provided a choice of oral fluid or blood-based test (OraQuick[®] (OraSure Technologies, Inc.) Rapid HIV-1/2 1/2 Antibody test or Determine[®]) and had the option to test privately or to test with assistance from one of the CBO staff. In all, 143 staff of 16 CBOs (including 12 MSM, two PWID and two FSW groups) participated in the training and provided HIV testing services as part of this pilot.

In 2016, VAAC and USAID/PATH Healthy Markets evaluated the KP-led HIV lay and HIVST pilots through a cross-sectional survey among KPs that used HIV lay testing (n = 918) or that self-tested (n = 936). The evaluation found that 67% were first-time HIV testers, 85.8% preferred lay provider testing to health provider testing, 86.8% said they preferred to be tested in a community versus health facility setting, and 95.4% of those receiving KP HIV testing services said they would recommend them to a friend. Privacy, confidentiality, convenience and a quick result were the top four reasons for opting for KP-led HIV testing. Lay provider testing yielded a higher HIV positivity rate (4.1%), particularly among first-time testers (6.8%), compared with facility-based testing (nationally estimated at 1.6% in 2016) and had a high ART initiation rate (91%).^{46,47} Results from this evaluation are presented in detail in a previous publication.⁴⁸ Since the pilot, HIV confirmation rates and ART enrolment have remained high (>90%) through HIVST, lay-testing and KPled partner notification services. (Figs 3, 4).

As a result, the Vietnam Ministry of Health and the VAAC developed and approved national guidelines on communitybased HIV testing and counselling in April 2018. To further



Fig. 3. HIV lay testing cascade, 2019 (USAID/PATH Healthy Markets).



Fig. 4. HIV self-testing (assisted) cascade among key populations, May 2016–March 2020.

enable the sustainability of KP CBO-led testing, Decree 155 was put in place to allow KP CBOs and social enterprises to distribute and sell HIV testing services and HIVST kits. From 2017 onwards, other provinces began adopting KP-led HIV lay testing and The Global Fund concept note for 2018–20 financed expansion of KP-led lay testing into 32 of 62 provinces in Vietnam.

The introduction of KP-led HIV testing boosted the confidence of KP CBOs and led to several registering as social enterprises, including the establishment of 12 KP-led and owned private clinics in six provinces in Vietnam. This enabled KP CBOs, for the first time, to develop as businesses and make money to contribute to their long-term sustainability.⁴⁹

KP CBOs have also expanded the services they offer since they were first established to provide HIV testing. This includes rapid syphilis and hepatitis C tests with HIV testing, to maximise convenience for clients and focus on the key diseases experienced by KPs in Vietnam, and they play a key role in screening and actively referring clients who test HIV negative through their services to non-occupational postexposure prophylaxis (nPEP) or PrEP services.

In conclusion, for Vietnam, KPLHS were and are essential to ensure service choice and access. Through the lay HIV testing pilot, KP CBOs have established their professionalism, creativity and trusted relationship with the community, and have proven that they are integral to achieving Vietnam's goals of ending AIDS by 2030.

From decentralisation to certification

Under the KPLHS model, KP lay providers have their capacity built and strengthened to provide HIV services in partnership with the health sectors. These services are designed in consultation with KP members themselves and are, therefore, needs-based, demand-driven, and client-centred.⁵⁰ This model is critical to fulfil the gaps along the HIV cascade by increasing the accessibility, availability, acceptability and improving the quality of health services for KPs.

KP CBOs have been actively involved in the HIV response in Thailand since the 1990s. In the early days, their roles focused on outreach, recruit, and provision of community and home-based care, and recently have been expanded to include HIV and STI screening and testing, and ART and PrEP dispensing under implementation research. However, there has not been a policy/regulation supporting task shifting/sharing for lay providers to perform medical practices in Thailand.⁵¹

Through collaborative efforts made by a consortium established by the TRCARC and its partnered CBOs, together with the Ministry of Public Health (MOPH), a committee to formulate task shifting policy was established and MOPH's regulation was revised to allow trained KP lay providers to perform HIV counselling, specimen collections for HIV/STIs rapid/point-of-care tests, and ART and PrEP dispensing. The national quality HIV/STI standards for KP lay providers and certification steps are in the process for endorsement by the National AIDS Committee and the MOPH. The competency-based training is being considered as 'certified training curricula'.

A ministerial regulation sanctioning KP lay providers' roles was signed by the MOPH on 6 June 2019 and promulgated in the Ministry's gazette in September 2019.⁵² In addition, with collaboration among key stakeholders, a quality standard for HIV/STIs service delivery has been created and launched out nationally and a national operation plan for KP lay provider certification has been developed. This certification process is an essential step in allowing KP lay providers and their organisations to receive government funding through the national public health program, while ensuring the technical quality of services provided. In addition, it provides a good example of how sustainability of KP-led organisations can be achieved.

Conclusion

KP lay providers in Asia and the Pacific are essential to the HIV response. By demedicalising health services, and training and equipping communities to deliver services to their peers, HIV care access and uptake among KP can increase, particularly among those that may have never previously sought a HIV test, or accessed PrEP. Governments in Asia and the Pacific need to commit to demystification, destigmatisation, and decentralisation of HIV services, and move towards integrating these elements, as well as the KP lay providers that have proven to be essential to these elements, into their healthcare policies. If the Asia–Pacific is to end HIV in the region, and to overcome the deep reversal of progress due to the COVID-19 pandemic, KP lay providers will need to be recognised and sustained in the national public health

system as integral to service delivery by governments and donors alike, and certification and accreditation mechanisms need to be prioritised to achieve this.

Conflicts of interest

NP is a Joint Editor for *Sexual Health* but was blinded from the peer-review process for this paper. RJ and KEG are guest editors of *Sexual Health* but were blinded from the peer-review process for this paper. The remaining authors declare that they have no conflicts of interest.

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