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Global AIDS Monitoring

Country Progress Report - Malaysia

Ministry of Health Malaysia

Disease Control Division

The Global AIDS Monitoring Report 2021

This report was coordinated and produced by HIV/STI/Hepatitis C Section of Ministry of Health Malaysia.

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Foreword

Year 2020 has been difficult for many people living with HIV. The COVID-19 pandemic has disrupted community-based HIV screening and prevention activities. Movement control orders and various non-pharmacological prevention strategies such as physical distancing, limitations in face-to-face consultations have restricted PLHIVs' access to health care and other social support. Gains previously made by the national HIV programme are at risk of being reversed.

Health providers and community outreach workers are faced with continued challenges posed by COVID-pandemic in providing HIV services to the key populations. However, these are not the emphasis of this report. Instead, our priority is maintaining a resilient HIV programme that continues to be responsive to the health needs of PLHIVs, and monitoring data to gain insights into changes in national programmatic performance.

We report key national HIV programmatic data in 2020, as well as an overview of HIV epidemic along with its comorbidities among key populations, focusing on testing, treatment and support.

Malaysia is committed to the UNAIDS global vision of ending AIDS as a public health threat by 2030, this gives us a window of nine years to achieve the goal. Malaysia has more than three decades of experience in HIV response. Building upon such foundation with ongoing government support, commitment from partner organizations and greater community buy-in, we can ensure that we get on track to ending AIDS by 2030.

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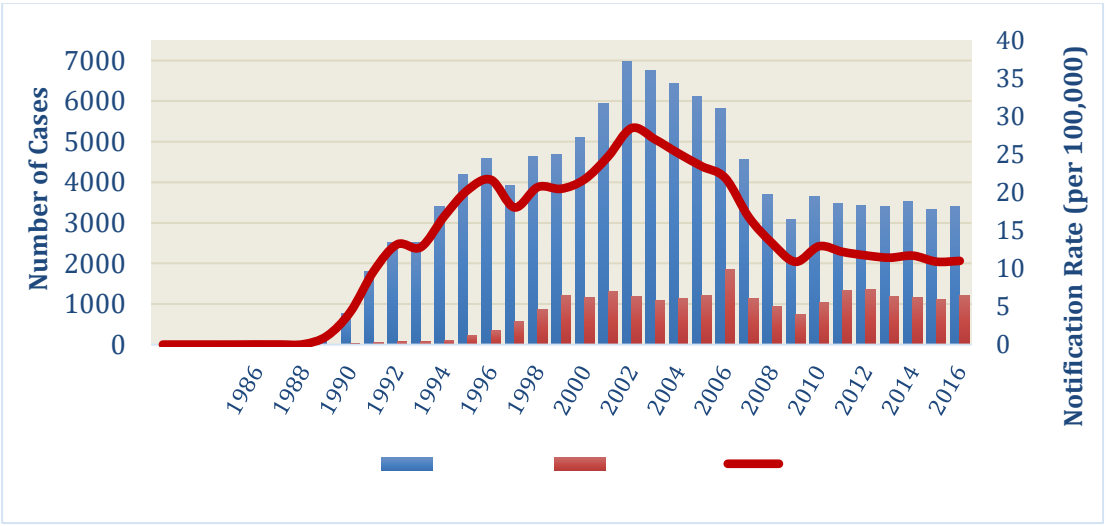
1. Overall

Malaysia is off track for its 2020 goals of attaining 90-90-90 in testing-treatment-viral suppression cascade. This is in part contributed by major shifts in epidemiology landscape for HIV from needle-sharing to sexual transmission, and in part by stigma and discrimination faced by PLHIV which impedes efforts to link newly diagnosed PLHIV to care.

Table 1: overview of HIV epidemic, Malaysia 2020

Indicator	Number
Cumulative number of reported HIV	125,878
Cumulative number of reported AIDS	28,085
Cumulative number of deaths related to HIV/AIDS	45,450
Estimated people living with HIV (Spectrum 2021)	92,063
Total number of people living with HIV (surveillance data)	80,428
Reported new HIV infections	3,146
HIV notification rate (per 100,000)	9.3
People living with HIV receiving ART as of December 2020	46,931

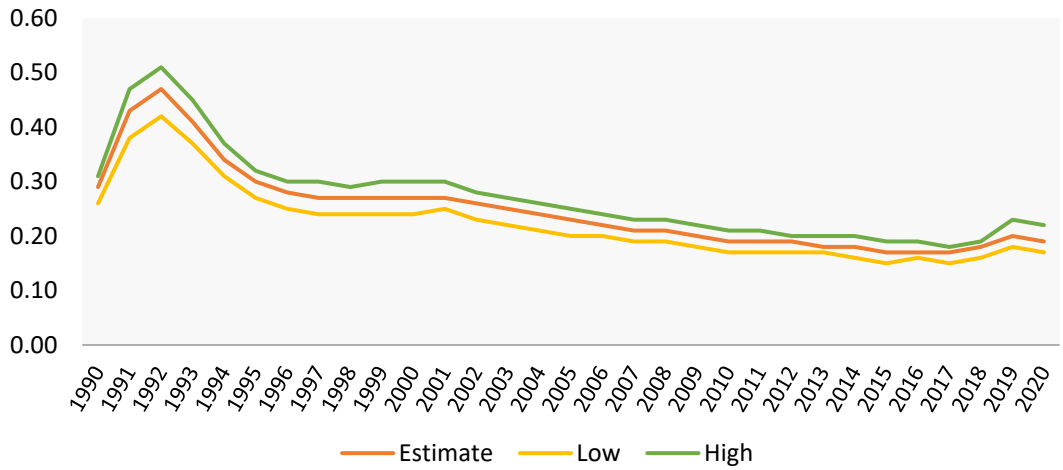
Figure 1: Reported HIV and AIDS, Malaysia 1986 – 2020



At the end of year 2020, there were estimated 92,063 people live with HIV (PLHIV) in Malaysia, 80,428 (87%) of whom were aware of their status and had been notified through the national surveillance system (Table 1). By December 2020, 58% of the reported PLHIV were receiving antiretroviral treatment (ART).

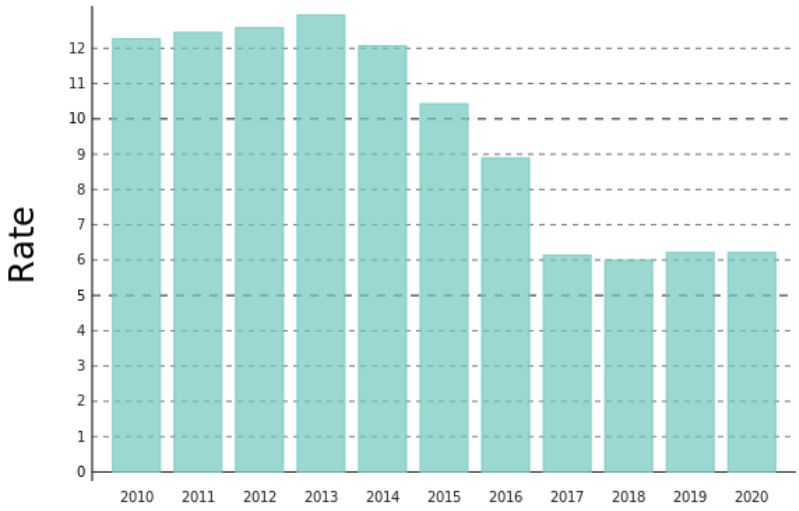
New HIV infection has declined by more than 50% from year 2002, with 6,978 cases new HIV notification (equivalent to 28 cases per 100,000 population), to 3,146 cases in 2020 (equivalent 9.3 cases per 100,000 population) (Figure 1), while the estimated HIV incidence rate per 1000 uninfected population has also gradually declined to 0.19 in year 2020.

Figure 2 Estimated HIV incidence rate per 1000 uninfected population, Malaysia, 1990 – 2020



(Source: Spectrum)

Figure 3 AIDS mortality per 100,000 population, Malaysia (2010 - 2020)



Source: Spectrum

More than half of new HIV cases were notified from populous states such as Selangor, Federal Territory of Kuala Lumpur and Penang.

From the beginning of the HIV epidemic, HIV case notification has shown a male preponderance pattern, with male/female ratio of 6.5 in 2020.

Figure 4: People living in HIV in Malaysia by state, 2020

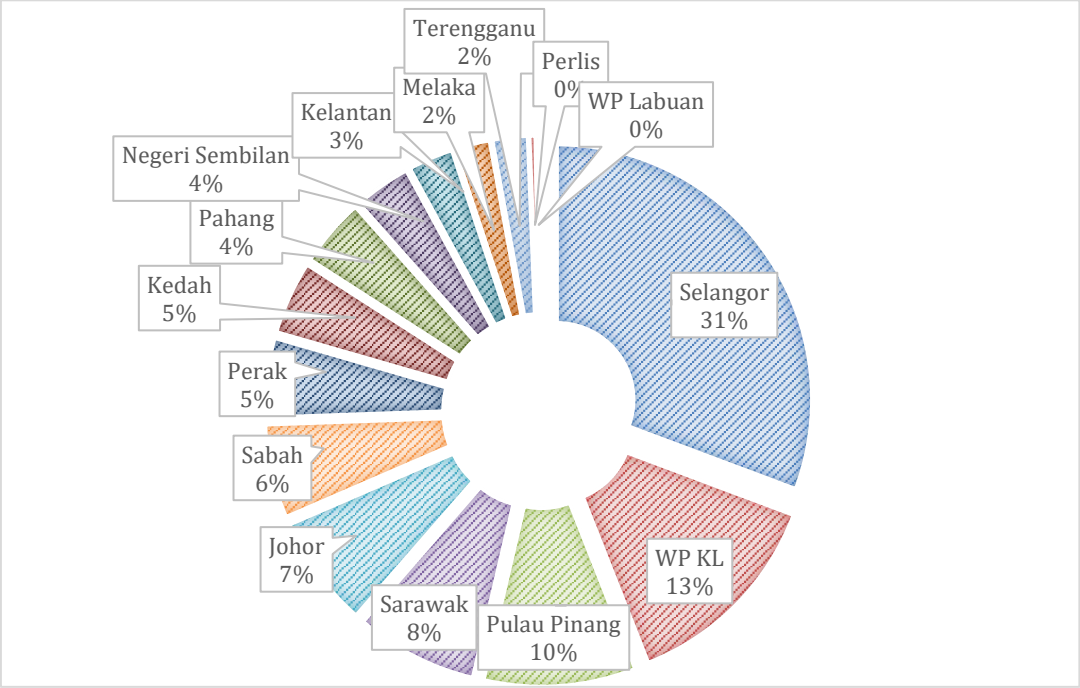
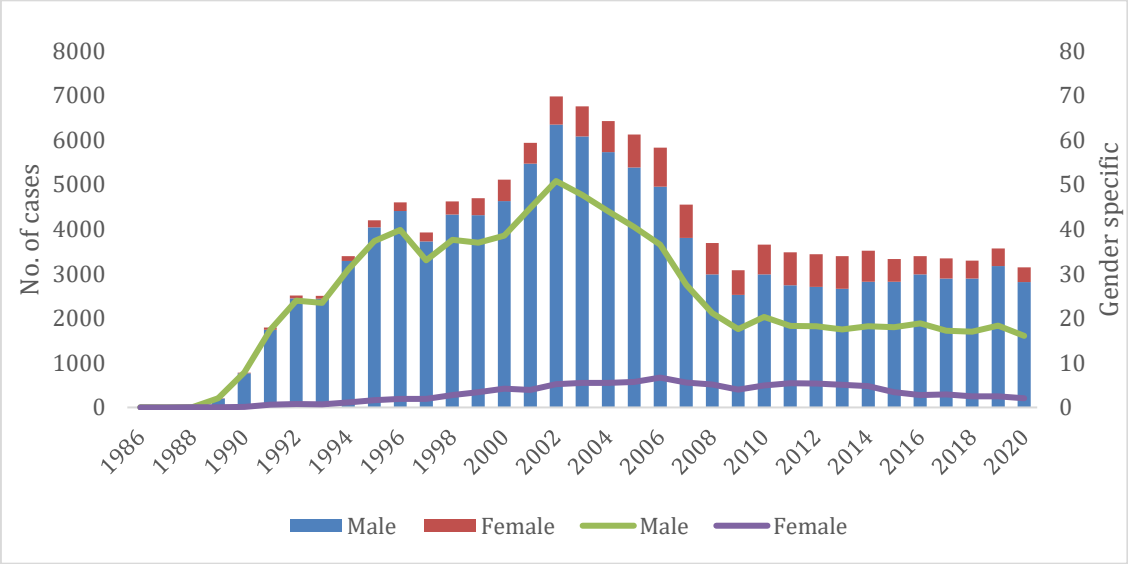


Figure 5: Distribution of reported HIV cases by gender, Malaysia 1986 - 2020



As mentioned previously, the initial driving force of HIV epidemic in Malaysia was PWID followed by FSW, TG and MSM. In the last decade, sexual transmission has become the main mode of transmission, and MSM is expected to become the main key population in

Malaysia in year 2030 as projected using the Asian Epidemic Modelling (AEM) (Figure 6). Consistent with the projection, Figure 7 also shows trend of HIV transmission mode in Malaysia using surveillance data, with PWID/sexual transmission ratio declining from 3.95 in 2000 to 0.04 in 2020.

Figure 6: HIV infection trend by key population (projection using AEM), Malaysia 1986 – 2030

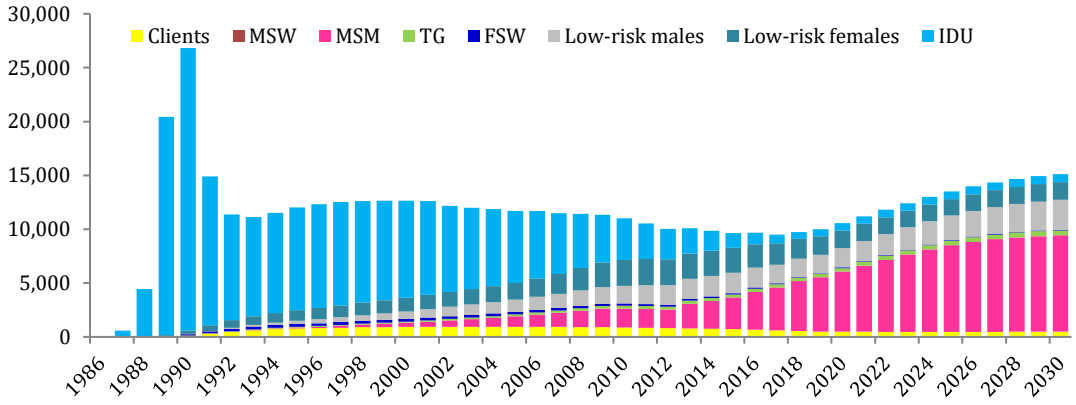
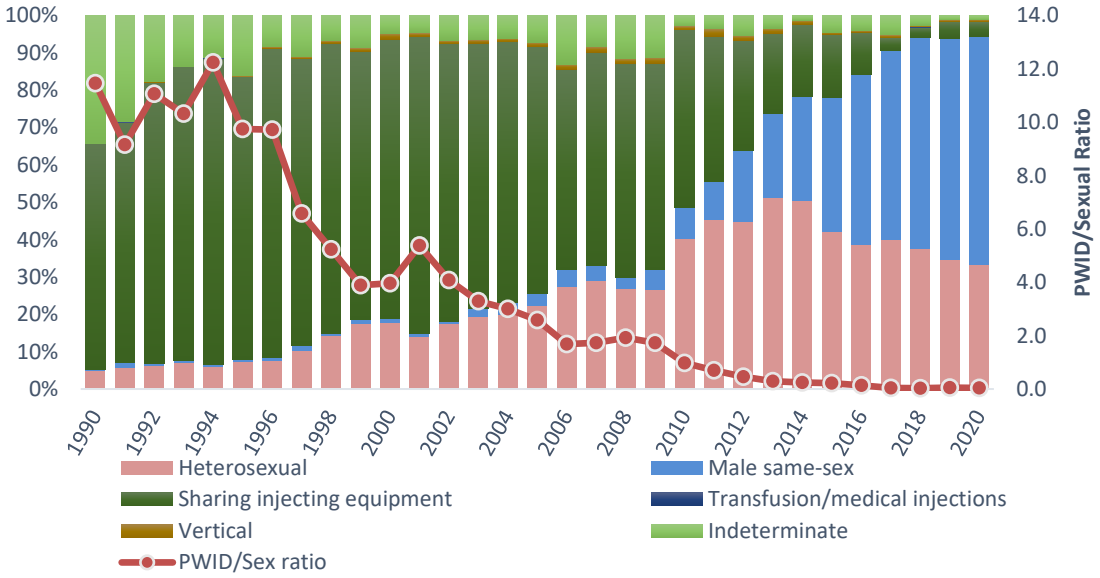
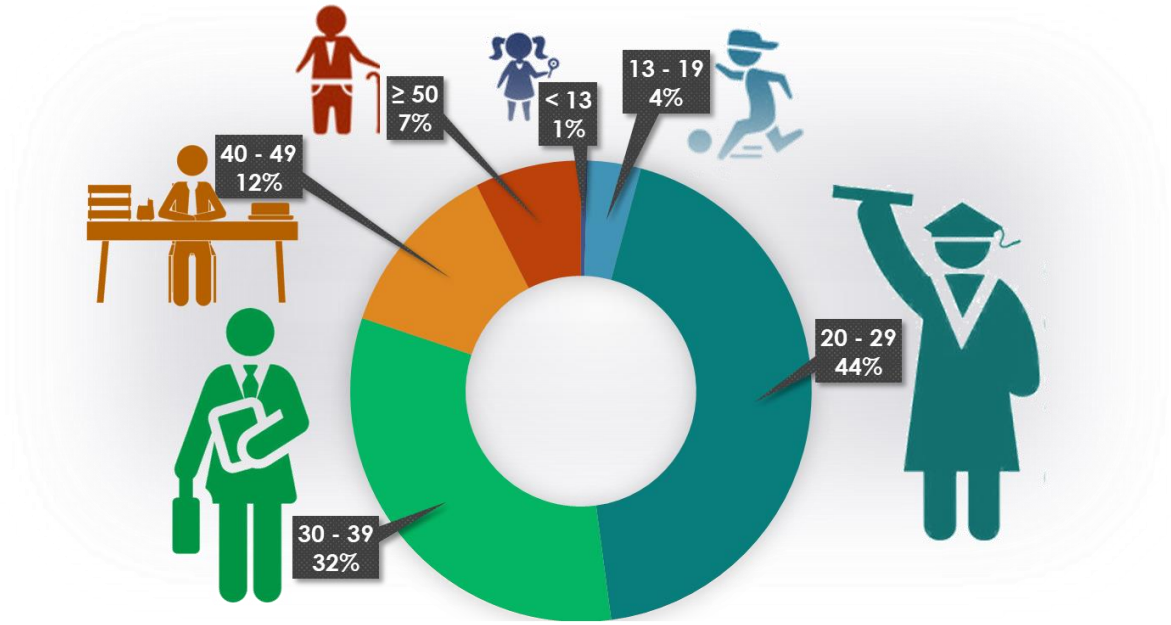


Figure 7: Trend of HIV infection by mode of transmission, Malaysia 2000 – 2020



More than 70% of HIV new infections are reported among people aged 20 to 39 years old in year 2020 (Figure 8).

Figure 8: Distribution of reported HIV cases by age group, Malaysia 2020



2. HIV Testing And Treatment Cascade

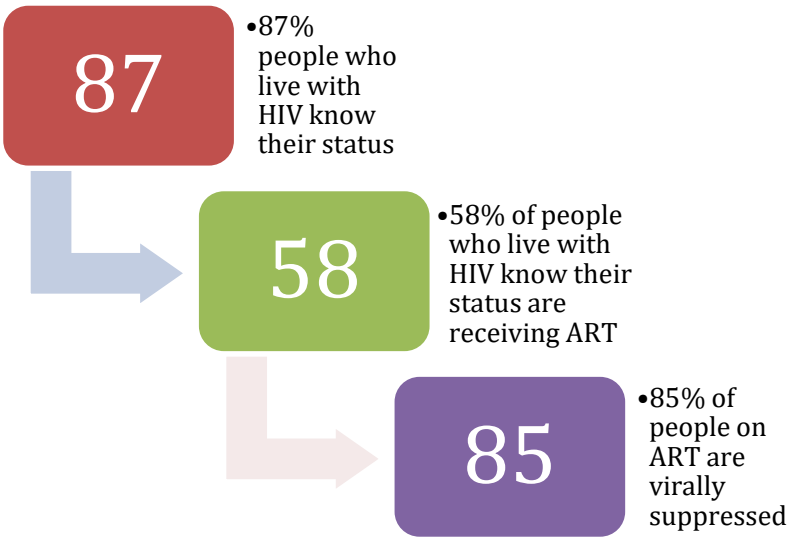
Ensure that 30 million people living with HIV have access to treatment through meeting the 90-90-90 targets by 2020

The NSPEA highlighted testing and treatment as one of the main national responses towards the aim of ending AIDS. This is to ensure that all PLHIV in Malaysia have access to treatment through meeting the 90-90-90 targets by 2020. In 2017, Malaysia implemented the WHO recommendation for initiation of ART (free of charge) regardless of CD4 cell count. In addition, viral load testing is routinely performed for monitoring of ARV therapy in government treatment sites.

Progress towards 90-90-90 target, Malaysia (2020)

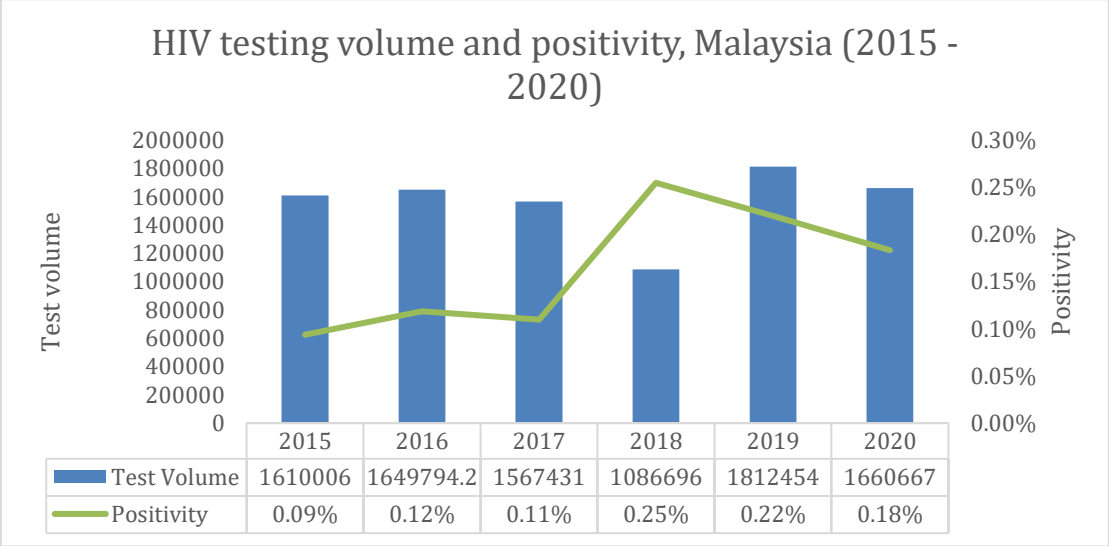
In regards of Malaysia's progress on the targeted 90-90-90 treatment cascade, by the end of 2020, 87% of the PLHIV are diagnosed to be HIV and know their results, the treatment uptake among people diagnosed with HIV is 58% which indicates a gap in treatment and care, and out of those already on treatment, 85% become virally suppressed (Figure 9).

Figure 9: Progress towards 90-90-90 target, Malaysia (2020)



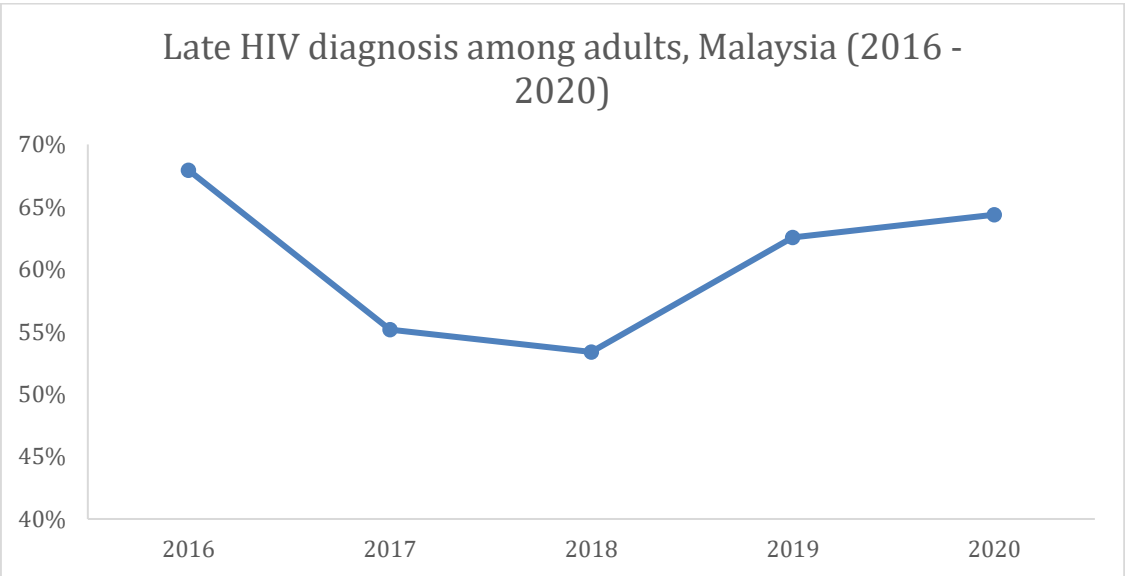
HIV testing volume and positivity, Malaysia

Figure 10 Percentage of HIV -positive results returned to people (positivity)



Late HIV diagnosis, Malaysia (2016 - 2020)

Figure 11 Percentage of people living with HIV with the initial CD4 cell count <350 cells/mm3 in 2020

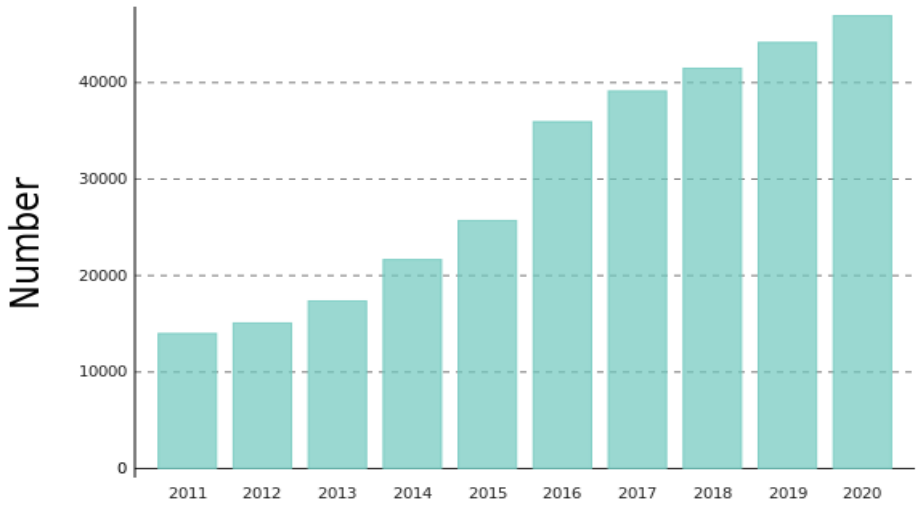


HIV testing programme in Malaysia continues to expand over the years. It now encompasses static facility-based testing as well as community-based testing which specifically targets hard-to-reach key populations. As a result, the proportion of PLHIV knowing their status is slowly and steadily progressing towards 90%. However, 64% of the new patients are diagnosed at a late stage. This reflects a need for improve population awareness so that people with high-risk behaviours will get tested at least annually.

People living with HIV on antiretroviral therapy, Malaysia (2011-2020)

Linkage to care and retaining patient in ART treatment remain the biggest challenge. However, once on treatment, majority become virally suppressed. The treatment cascade showed that there is a need to improving the delivery of services to people living with HIV across the entire continuum of HIV care.

Figure 12 Number of people on antiretroviral therapy



People living with HIV on antiretroviral treatment who have suppressed viral load, Malaysia (2017-2020)

Figure 13 Number of people living with HIV with suppressed viral loads

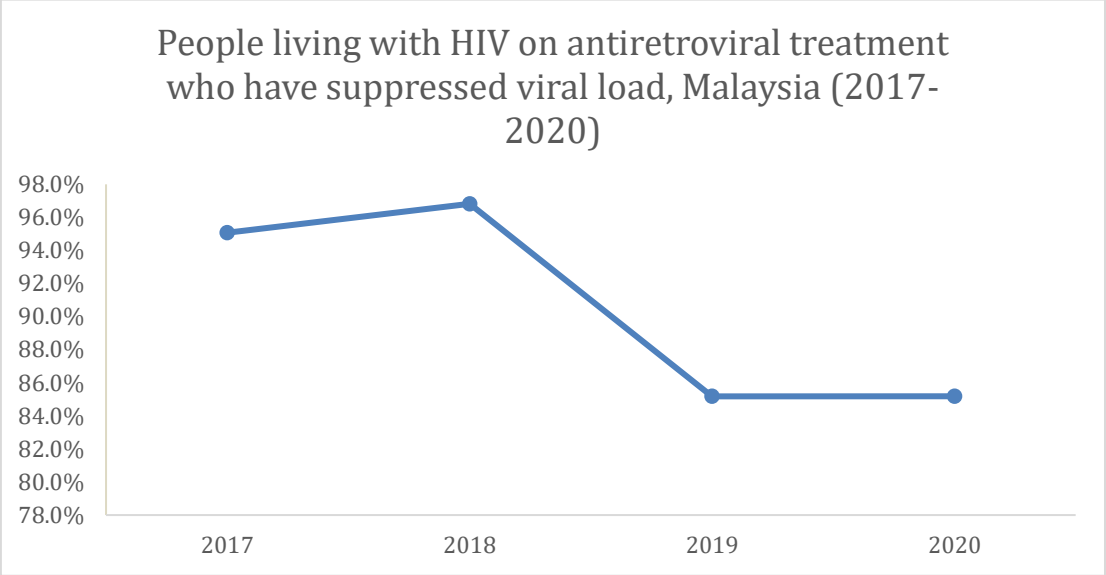
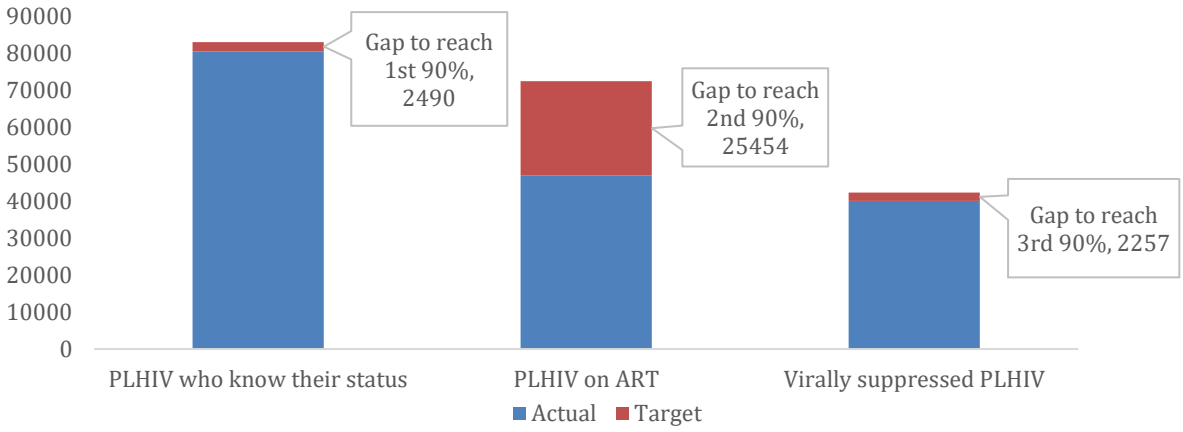


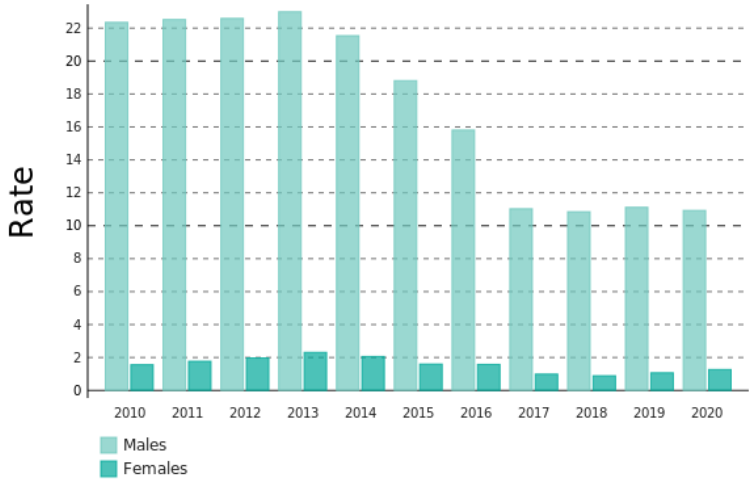
Figure 14: HIV testing and treatment cascade in Malaysia, 2020



Expansion of availability and accessibility of antiretroviral treatment to all PLHIV has contributed to steady decline in AIDS mortality from 12.27 per 100,000 population in 2010 to 6.22 per 100,000 population in 2020 (Figure 15).

1.6 AIDS mortality rate per 100 000, Malaysia (2010-2020)

Figure 15 Total number of people who have died from AIDS-related causes per 100 000 population



Source: Spectrum file

3. Prevention Of Mother-To-Child Transmission

Eliminate new HIV infections among children by 2020 while ensuring that 1.6 million children have access to HIV treatment by 2018

PMTCT programme for HIV was implemented countrywide in 1998, whereas PMTCT of Syphilis had started a decade earlier. In line with the WHO guideline[1], Malaysia adopted the programmatic target of less than 2.0% for HIV mother-to-child transmission rate, and a Congenital Syphilis case rate of ≤50 per 100 000 live births.

All HIV-exposed infants get free ARV prophylaxis and free replacement feeds for two years. The programme has been able to avert more than 98% vertical transmission in HIV-exposed infants in 2017 compared to 30-40% had there been no intervention, subsequently leading to Malaysia being certified as the first country in Western Pacific Region having eliminated vertical HIV transmission. In 2020, Malaysia has been able to maintain the mother-to-child-transmission of HIV rate at 1.69%.

[1] Global guidance on criteria and processes for validation: elimination of mother-to-child transmission of HIV and syphilis, 2nd Edition. Geneva: World Health Organization; 2017 (https://www.who.int/reproductivehealth/publications/emtct-hiv-syphilis/en/)

Figure 16: HIV and syphilis screening coverage and seroconversion rate (2010 – 2020)

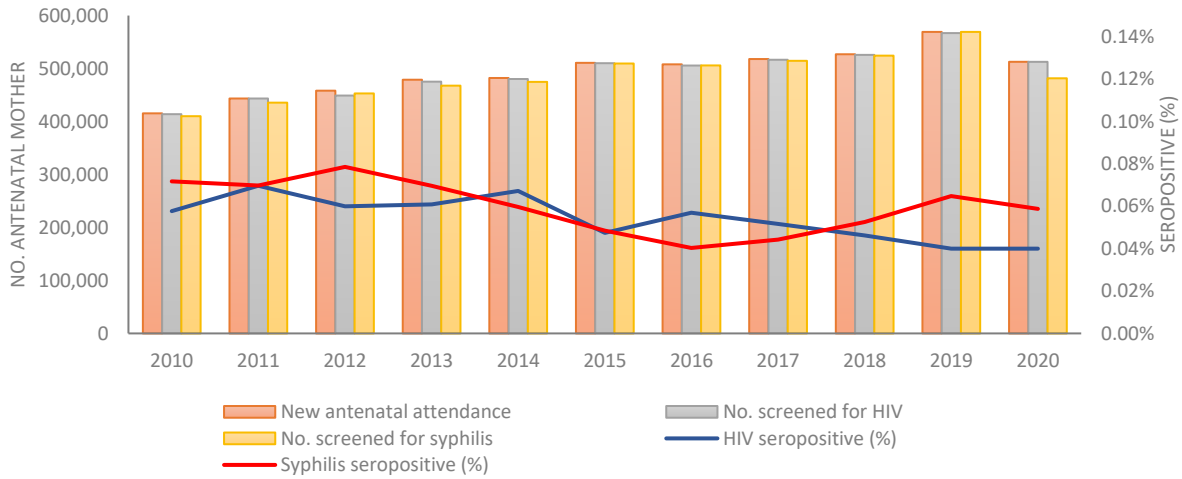
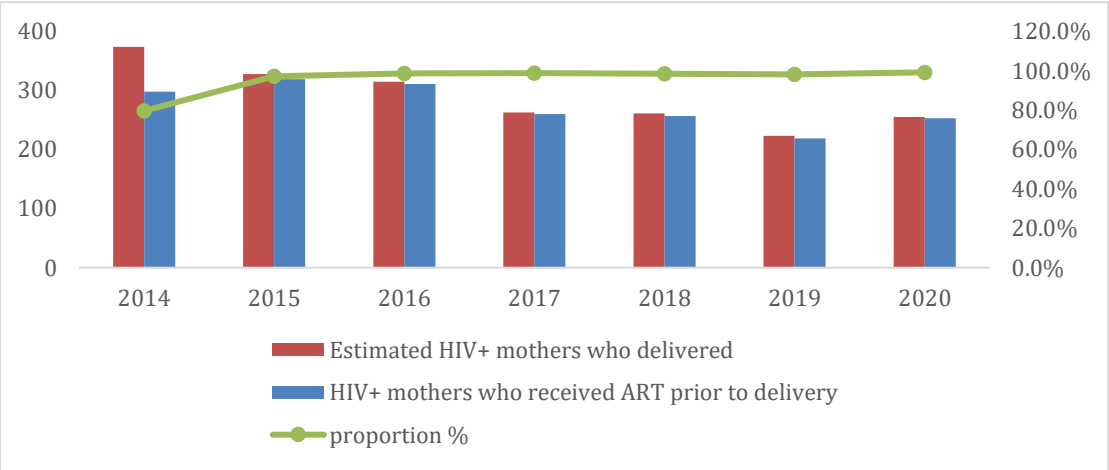
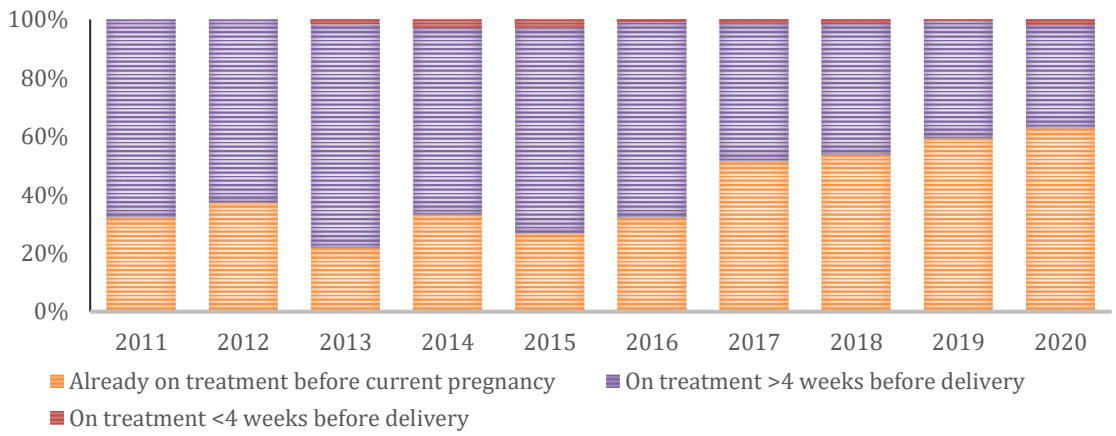


Figure 17 Percentage of pregnant women living with HIV who received antiretroviral medicine to reduce the risk of mother-to-child transmission of HIV



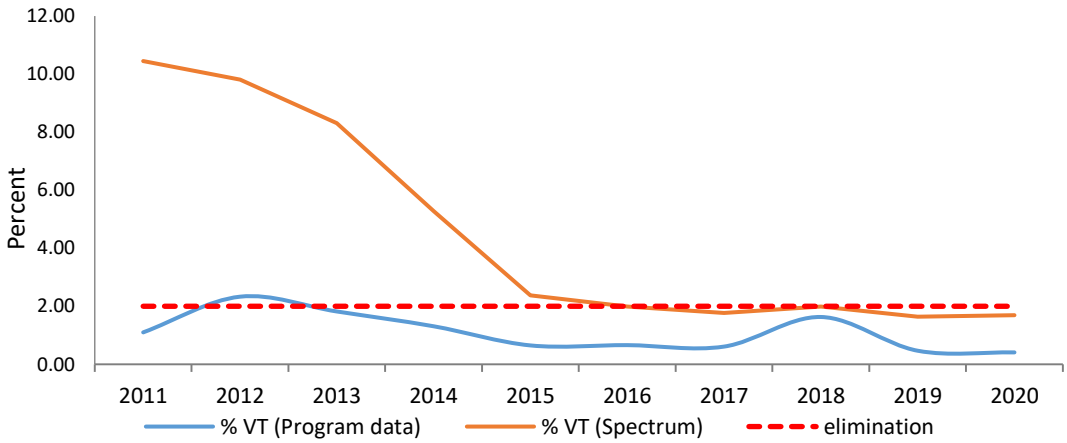
Source: Spectrum file

Figure 18: Percentage of pregnant women living with HIV who received antiretroviral medicine to reduce the risk of mother-to-child transmission of HIV



Proportion of pregnant women known to be living with HIV and already on ART at booking contributed to the largest number of pregnant women with HIV attending antenatal care. Hence more promising outcome to the baby.

Figure 19: Vertical transmission rate of HIV, Malaysia (2011-2020)

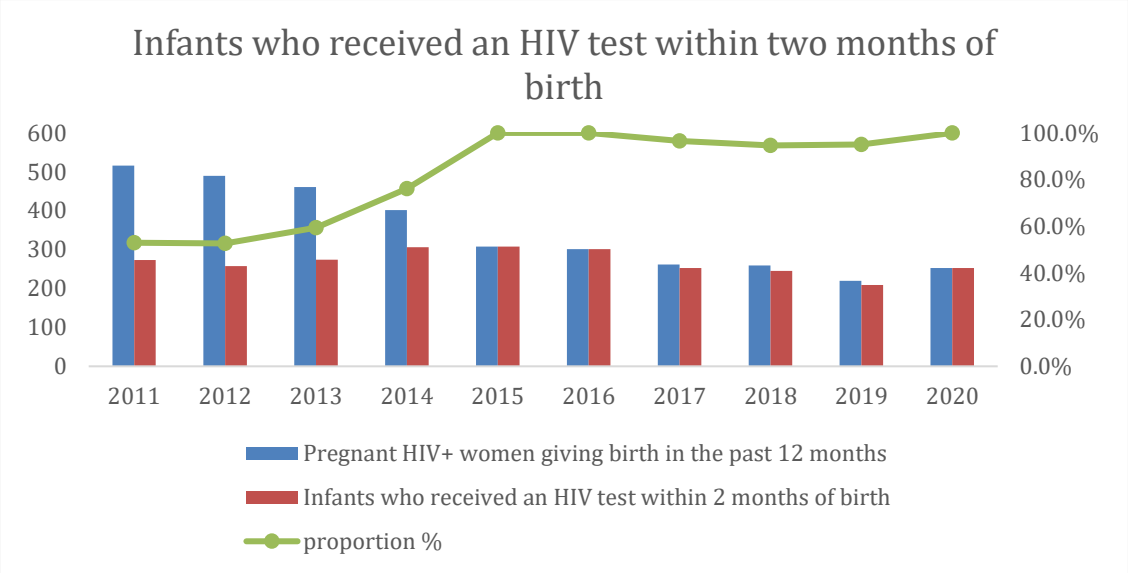


Early infant diagnosis, Malaysia (2011-2020)

In 2004, Malaysia started using HIV DNA PCR test for HIV diagnosis of infants for all babies born to HIV+ mothers. All HIV-exposed infants should have PCR testing at birth and 6 weeks. The national surveillance system reported the percentage of early infant diagnosis

(HIV-exposed infants receiving an HIV test within two months of birth) as 98.4% in year 2020 with one (1) new HIV paediatric infection[2].

Figure 20 Early infant diagnosis

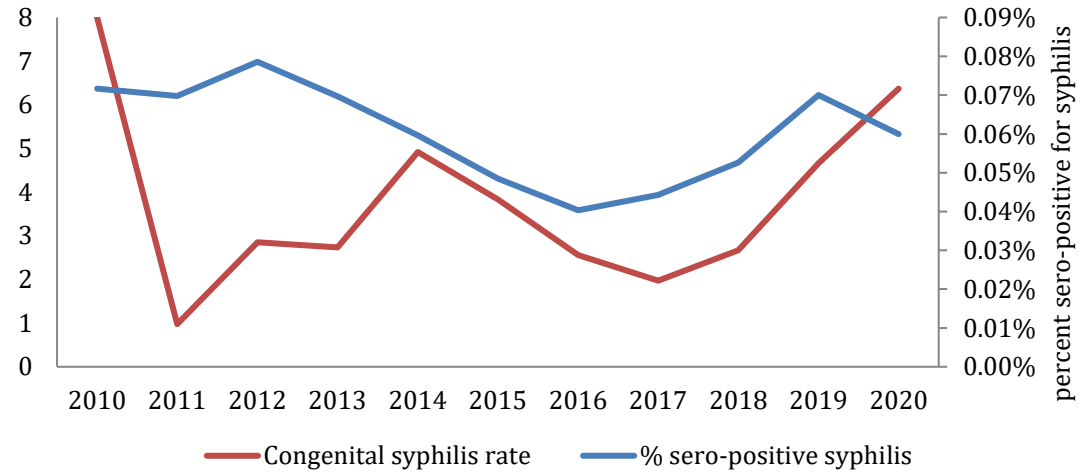


Syphilis among pregnant women, Malaysia (2020)

Over the years, the syphilis seropositivity among mothers has declined, together with the syphilis MTCT rate (Figure 21). The treatment coverage for syphilis infected mothers was 96% for 2020 and has remained above 95% over the past decade.

[2] HIV-exposed infant who has two concordant EID (PCR) positive at birth (0-2 weeks) and 6 weeks of life

Figure 21 Seropositive syphilis mother and Congenital syphilis rate (live births and stillbirth), Malaysia (2011-2020)



4. HIV Prevention; Key Populations

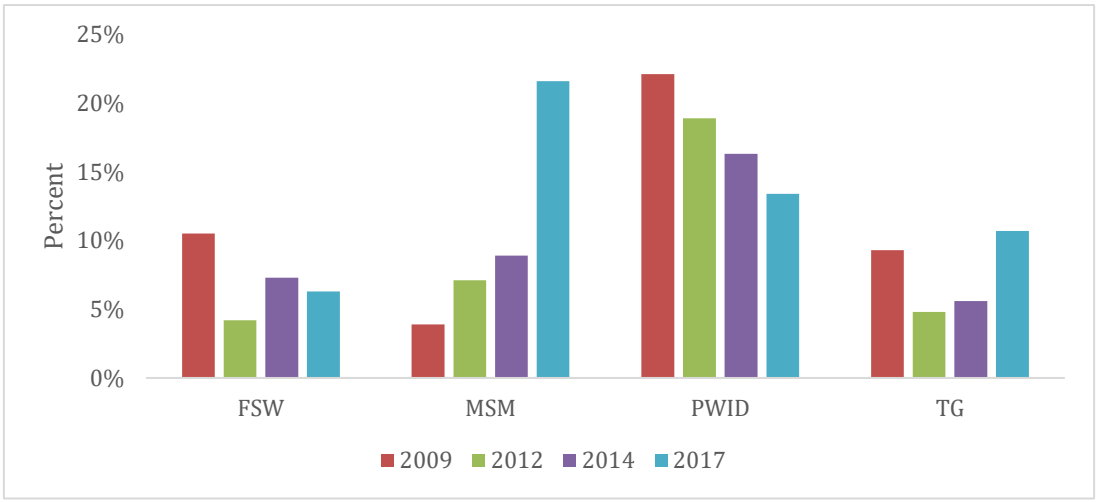
Ensure access to combination prevention options, including pre-exposure prophylaxis, voluntary medical male circumcision, harm reduction and condoms, to at least 90% of people by 2020, especially young women and adolescent girls in high-prevalence countries and key populations—gay men and other men who have sex with men, transgender people, sex workers and their clients, people who inject drugs and prisoners

Prevention of HIV transmission among key populations is prioritized as one of the key strategies in the NSPEA 2016 – 2030. As such, HIV prevention outcomes hinge heavily on various outreach programs conducted online and offline, which are also supplemented by internet-based campaigns.

Trained HIV outreach workers, who are members of key population-led organizations, will deliver a defined package of preventions services to key populations. The prevention package will be tailored for each population with regard to types of prevention commodity distributed and frequency of contact. Outreach workers will also provide referrals for key population members to further health services, social and legal support.

HIV prevalence among key populations, Malaysia (2011-2020)

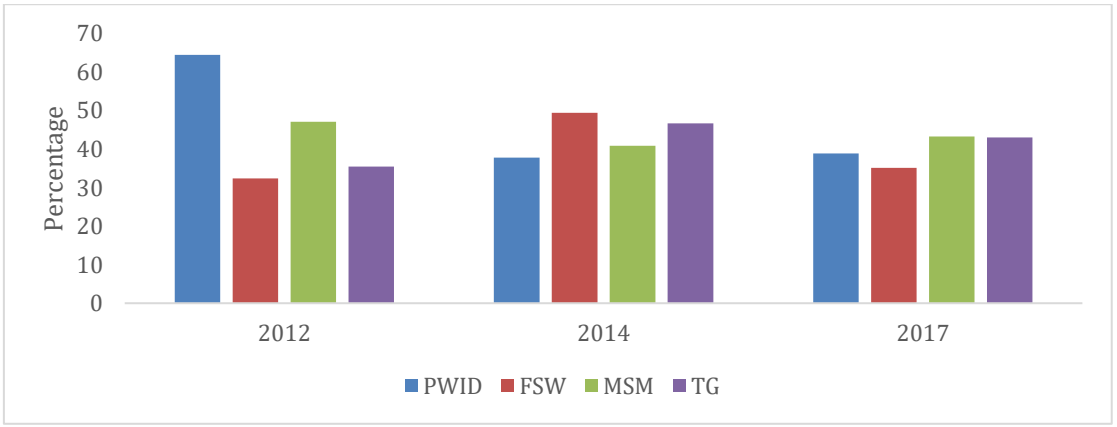
Figure 22 Percentage of specific key populations living with HIV



Source: IBBS Malaysia

HIV testing among key populations, Malaysia (2016-2020)

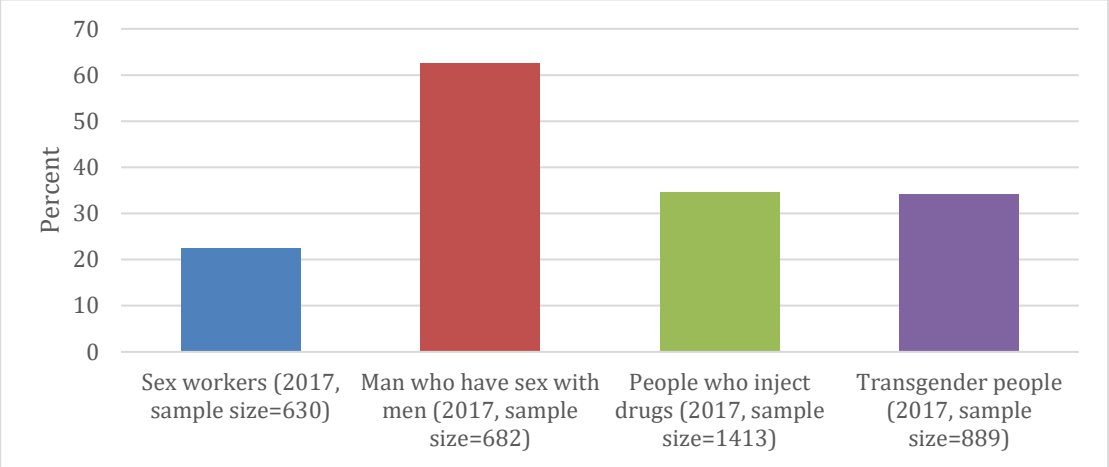
Figure 23 Percentage of people of a key population who tested for HIV in the past 12 months, or who know their current HIV status



Source: IBBS Malaysia

Antiretroviral therapy coverage among people living with HIV in key populations, Malaysia (2016-2020)

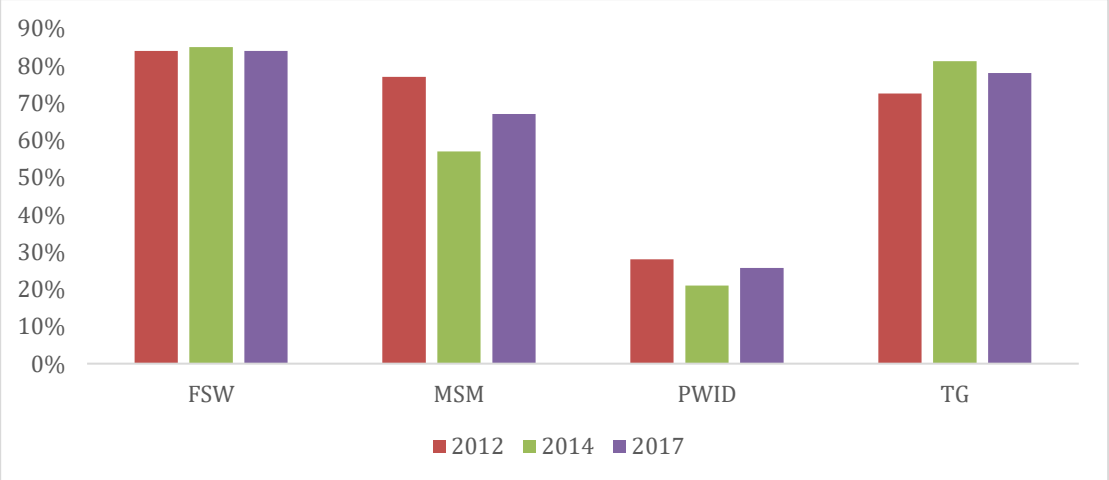
Figure 24 Percentage of the people living with HIV in a key population receiving antiretroviral therapy in the past 12 months



Source: IBBS Malaysia

Condom use among key populations, Malaysia (2011-2020)

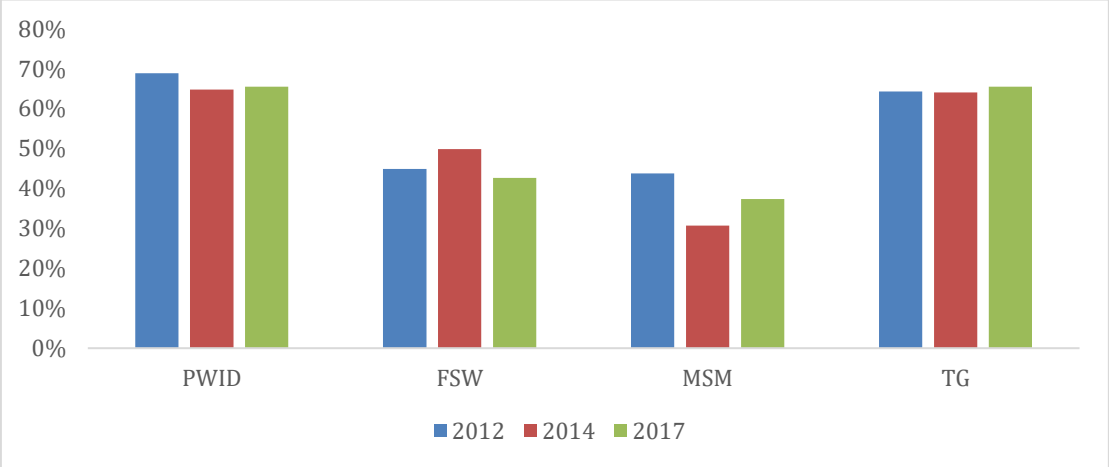
Figure 25 Percentage of people in a key population reporting using a condom the last time they had sexual intercourse



Source: IBBS Malaysia

Coverage of HIV prevention programmes among key populations, Malaysia (2016-2020)

Figure 26 Percentage of people in a key population reporting having received a combined set of HIV prevention interventions



Source: IBBS Malaysia

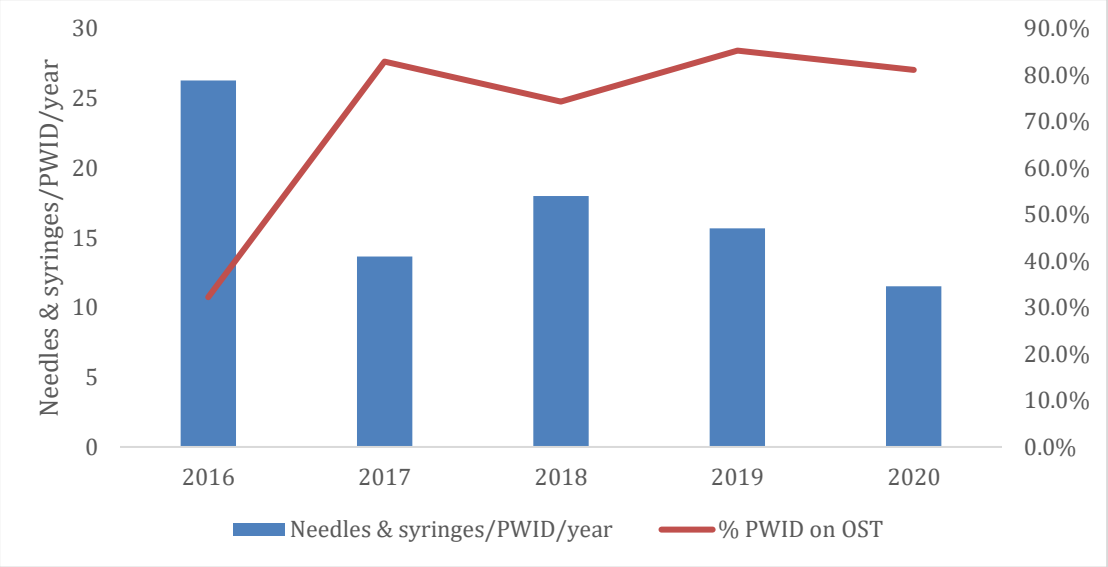
Harm reduction programme for people who inject drugs, Malaysia (2016-2020)

OST programme has been implemented at selected government and private health facilities since 2006. Over the years, it has increased to more than 81% of the estimated PWID population benefited this programme at the end of 2020 (Figure 27).

As OST becomes the mainstay of harm reduction strategies, the demand for NSEP, implemented through MOH-NGO partnership at selected outreach spots throughout the country, has gradually decreased.

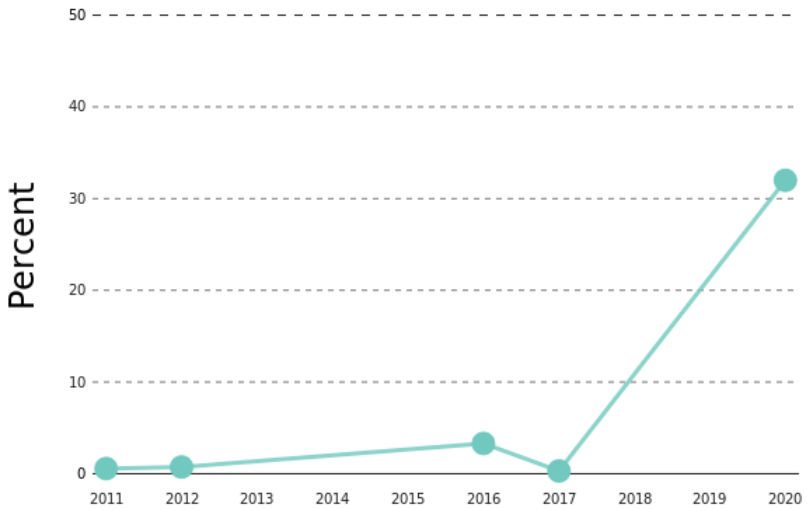
In 2020, the quantity of needles and syringes distributed per PWID per year has decreased by more than 50% compared to 2016. From 2019 to 2020, there is a 15% reduction in needle-syringe distributed. Apart from actual decrease in demand because of PWID transitioning fully to OST, this could also be due to COVID-19 related movement control order implemented nationwide. As a temporary measure, government health clinics had been made NSEP points during lockdowns. However, PWID's access to the health clinics were still restricted and this resulted in less needles distributed.

Figure 27 Needle-syringe exchange programme (NSEP) and Opioid Substitution Therapy (OST) Coverage among PWID, 2016 – 2020



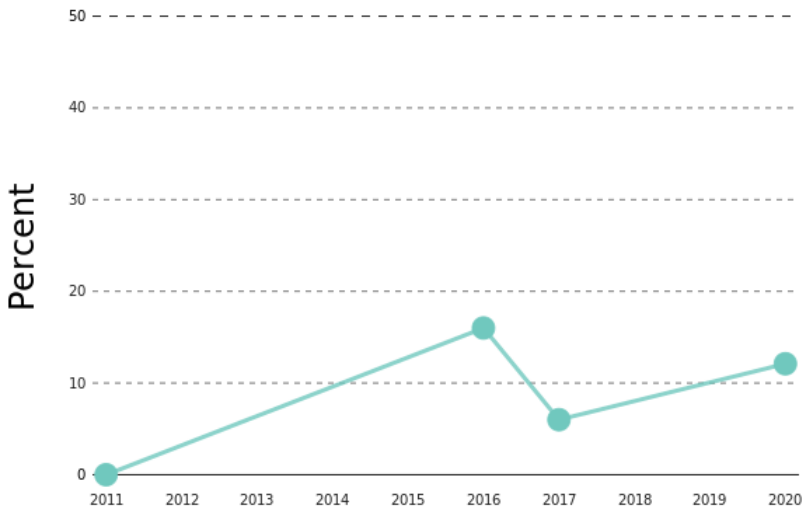
Active syphilis among sex workers, Malaysia (2011-2020)

Figure 28 Percentage of sex workers with active syphilis



Active syphilis among men who have sex with men, Malaysia (2011-2020)

Figure 29 Percentage of men who have sex with men with active syphilis



5. Gender; Stigma and Discrimination

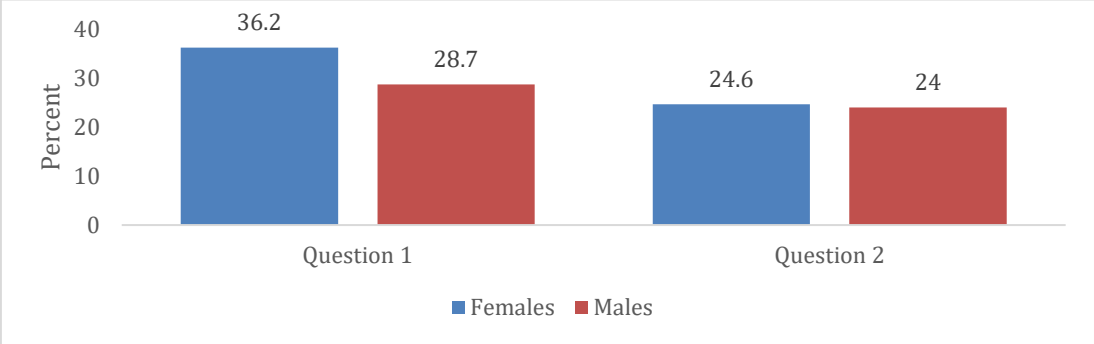
Eliminate gender inequalities and end all forms of violence and discrimination against women and girls, people living with HIV and key populations by 2020

To assess the discriminatory attitudes towards the PLHIV in general population, we have conducted an online survey in 2020 among general population. 2179 respondents aged between 15 to 49 years participated in this survey. One in three respondents said they would not buy vegetables from a seller with HIV, and one in four respondents believed that children living with HIV should not be allowed to attend school with other children. This shows that stigma and discriminatory attitudes of the general population towards PLHIV still prevail in the community (Figure 30).

In addition, the online survey also demonstrated only 39% of the general population have sound and comprehensive knowledge of the essential facts about HIV and AIDS. This finding suggests overall poor awareness about HIV in the population, and probably contributed to the high level of discriminatory attitudes towards PLHIV among study respondents.

Discriminatory attitudes towards people living with HIV, Malaysia (2020)

Figure 30: Discriminatory attitudes towards PLHIV among general population (aged 15 to 49 years)[3] by gender



[3] Who respond No to Question 1 - "Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had HIV?"; Question 2 - "Do you think that children living with HIV should be able to attend school with children who are HIV negative?"

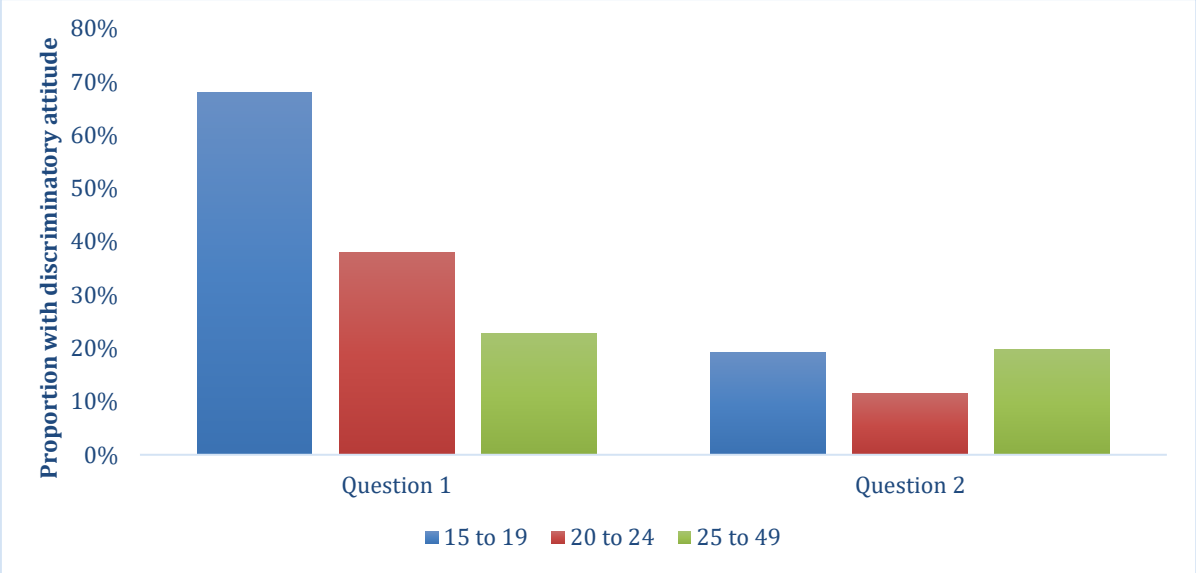
6. Knowledge Of HIV and Access to Sexual Reproductive Health Services

Ensure that 90% of young people have the skills, knowledge and capacity to protect themselves from HIV and have access to sexual and reproductive health services by 2020, in order to reduce the number of new HIV infections among adolescent girls and young women to below 100 000 per year

The same online survey on discriminatory attitudes towards the PLHIV conducted in 2020 shows that stigma and discriminatory attitudes is most prominent among young population aged between 15 to 19 years (Figure 31).

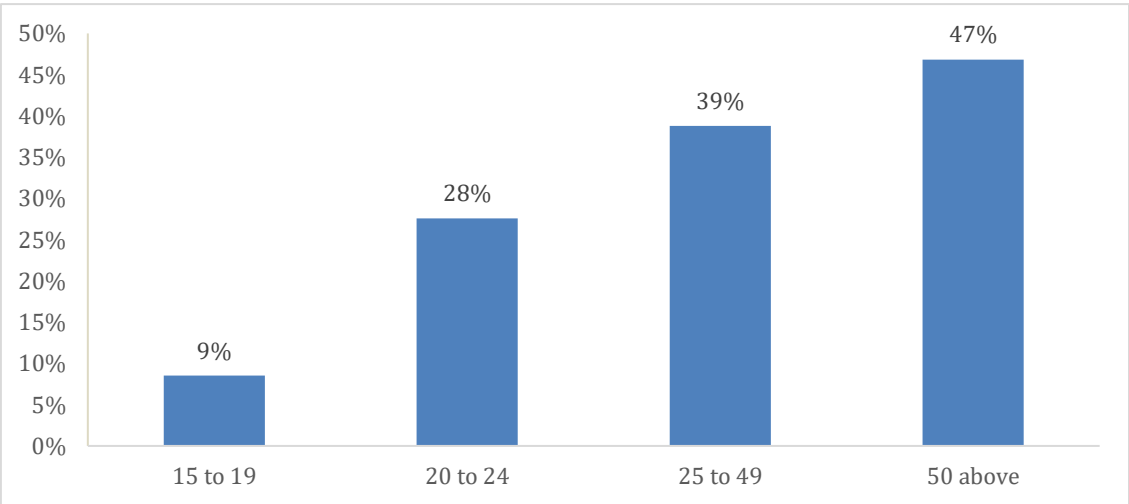
Strong stigma and discriminatory attitude towards PLHIV could reflect a lack of knowledge among young population about HIV compared to older adults (Figure 32). This is further supported by a survey conducted among secondary school students in Malaysia on knowledge on HIV, in which one in five respondents could correctly identify both ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission (Figure 33).

Figure 31: Discriminatory attitudes towards PLHIV among general population (aged 15 to 49 years) by age group



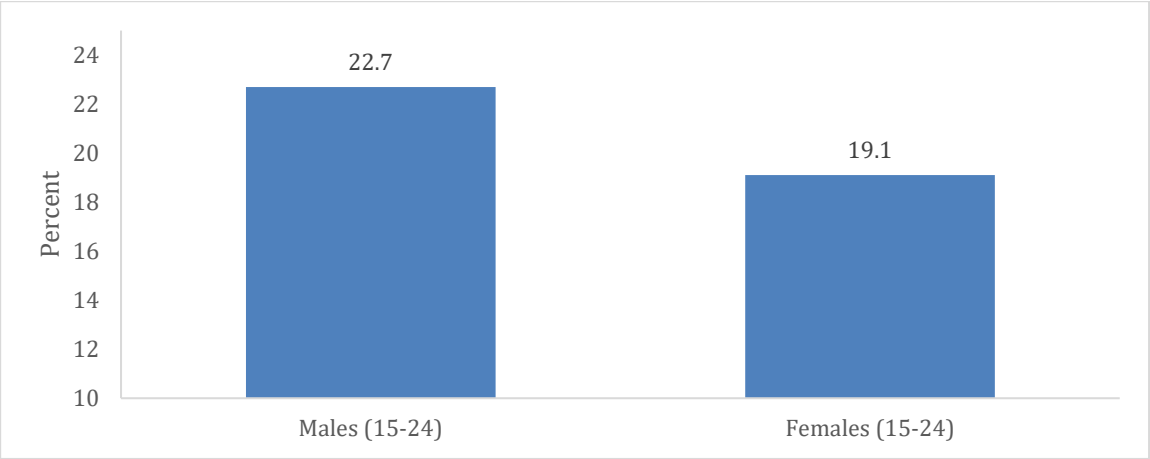
Note: Discriminatory attitude is defined as a "No" response to Question 1 - "Would you buy fresh vegetable s from a shopkeeper or vendor if you knew that this person had HIV?"; Question 2 - "Do you think that children living with HIV should be able to attend school with children who are HIV negative?"

Figure 32: Adequate[4] knowledge about HIV prevention by age group



[4] Correctly identify both ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission using the UNGGAS indicators

Figure 33: Adequate knowledge about HIV prevention among young population.



Note: to qualify as having adequate knowledge to protect themselves, respondents have to answer correctly to all five (5) questions on HIV. These are (1) "Can the risk of HIV transmission be reduced by having sex with only one uninfected partner who has no other partners?", (2) "Can a person reduce the risk of getting HIV by using a condom every time they have sex?", (3) "Can a healthy-looking person have HIV?", (4) "Can a person get HIV from mosquito bites?", and lastly (5) "Can a person get HIV by sharing food with someone who is infected?".

7. HIV Expenditure

Ensure that HIV investments increase to US$ 26 billion by 2020, including a quarter for HIV prevention and 6% for social enablers

FINANCING THE HIV AND AIDS RESPONSE

Since the beginning of the epidemic, HIV response in Malaysia rely heavily on domestic public funding (>80%). In 2020, the total expenditure for HIV response was RM85.9 million (USD20 million) (Table 2). Majority of the funding came from domestic fund (88%). More than 70% of the funding was spent on NSPEA strategy 1, testing and treat to reduce the gap on the first and second 90 of HIV treatment cascade.

Table 2: Source of approximate AIDS expenditure, 2018 - 2020

Source of funding	2018 (RM)	%	2019(RM)	%	2020 (RM)	%
Domestic Public	81,694,054	90	56,064,853	93	75,830,930	88
Domestic Private	3,248,089	4	1,943,924	3	3,444,475	4
International	5,877,951	6	2,040,387	3	6,587,757	8
Total	**90,820,094**	**100**	**60,049,163**	**100**	**85,863,162**	**100**

Table 3: AIDS Spending category – Approximate total expenditure from domestic (public & private) and international sources, 2018 - 2020

Strategies / indicator	2018 (RM)	%	2019 (RM)	%	2020 (RM)	%
Treatment, care and support	67818384	74.7	42526230	70.8	65593214	76.4
Prevention of HIV transmission	12341701	13.6	11388544	19.0	9761898	11.4
Social protection	59535	0.1	56259	0.1	96946	0.1
Gender programmes	133122	0.1	51988	0.1	33645	0.0
Programmes for children and adolescents	368453	0.4	460872	0.8	144814	0.2
Community mobilisation	1064263	1.2	337140	0.6	1180431	1.4
Governance and sustainability	8858933	9.8	5105925	8.5	8910758	10.4
Critical enablers	88423	0.1	88606	0.1	36441	0.0
TB/HIV coinfection	87280	0.1	33600	0.1	105016	0.1
Total	90,820,094	100%	60049163	100%	85863162	100%

8. AIDS Out of Isolation

Commit to taking AIDS out of isolation through people-centred systems to improve universal health coverage, including treatment for tuberculosis, cervical cancer and hepatitis B and C

Commonly reported coinfections among PLHIVs are tuberculosis, blood-borne viral hepatitis and sexually transmitted infections. Among the coinfections, tuberculosis is of particular importance because annually, more than 1000 PLHIVs were diagnosed with TB disease. Furthermore, TB is the number two (2) cause of death among communicable, maternal, neonatal & nutritional diseases[5].

To combat coinfections, several policies are in place for the care of PLHIVs. These include Isoniazid preventive therapy (IPT) or latent TB infection (LTBI) prophylaxis for people living with HIV, Intensified TB case finding among people living with HIV, TB infection control in HIV health-care settings, Co-trimoxazole prophylaxis, Hepatitis B and C screening, treatment and management in HIV clinics.

In addition, surveillance and case management of sexually transmitted infections have been an integral part of HIV programme in Malaysia. This is because STIs, similar to majority of newly diagnosed HIV cases, are transmitted sexually. Evidence also showed that STIs increase the risk of HIV infection[6]. STI screening in Malaysia is not limited to HIV clinic, instead it is integrated into primary health services.

[5] Stop TB Partnership. (2021). Tuberculosis Situation In 2019 (http://www.stoptb.org/resources/cd/MYS_Dashboard.html)

[6] US CDC. (2021). STDs and HIV – CDC Fact Sheet (https://www.cdc.gov/std/hiv/stdfact-std-hiv-detailed.htm)

Figure 34: New TB, HIV and TB/HIV Prevalence, Malaysia (2000 – 2020)

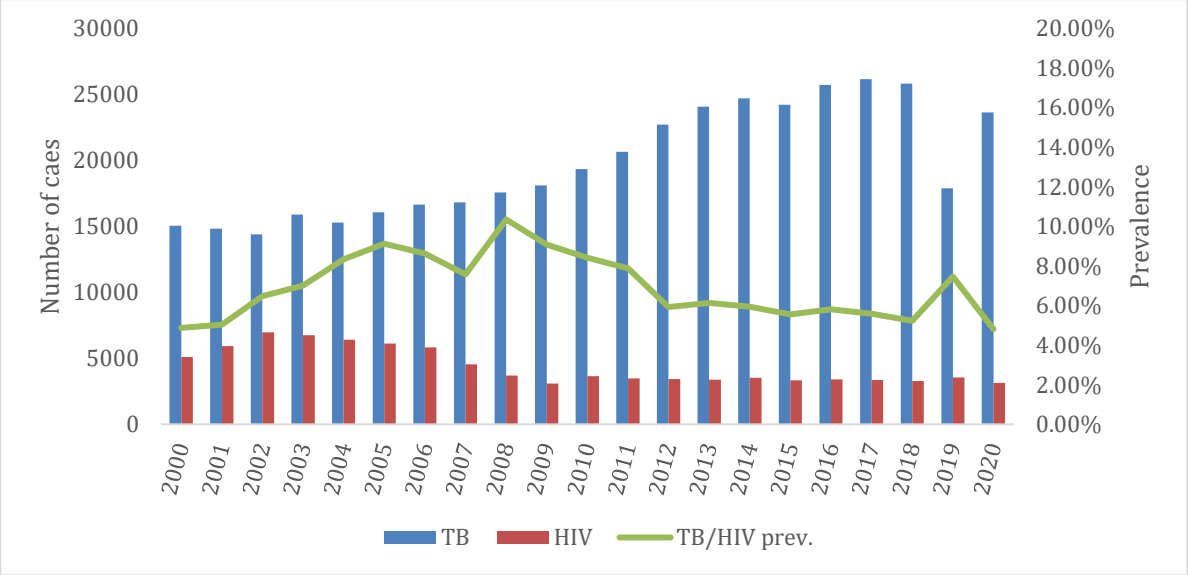
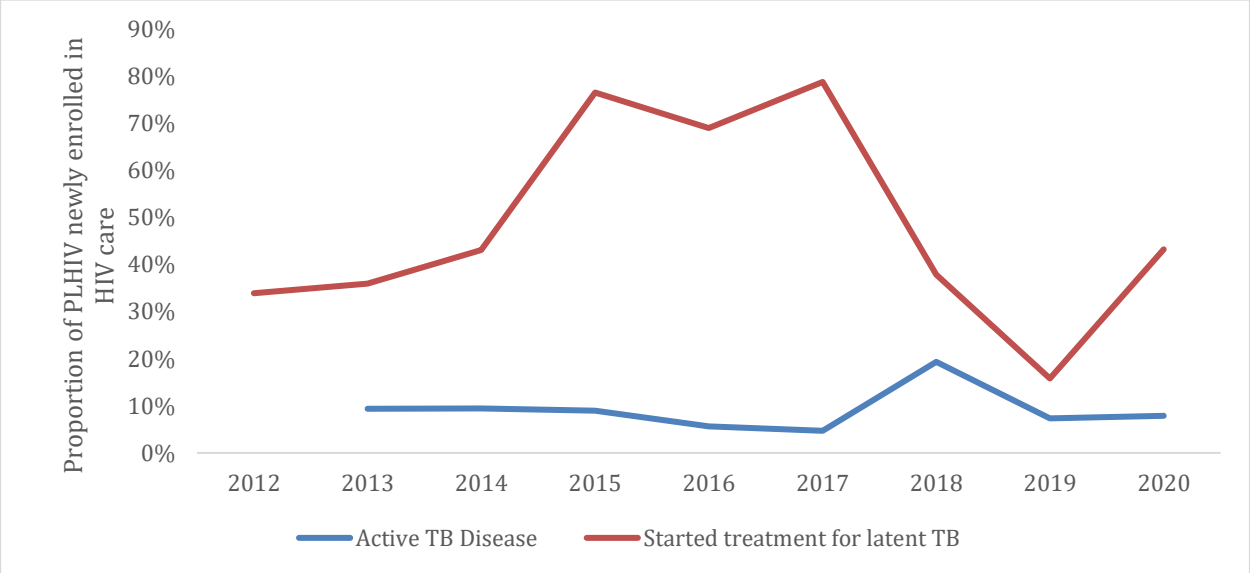
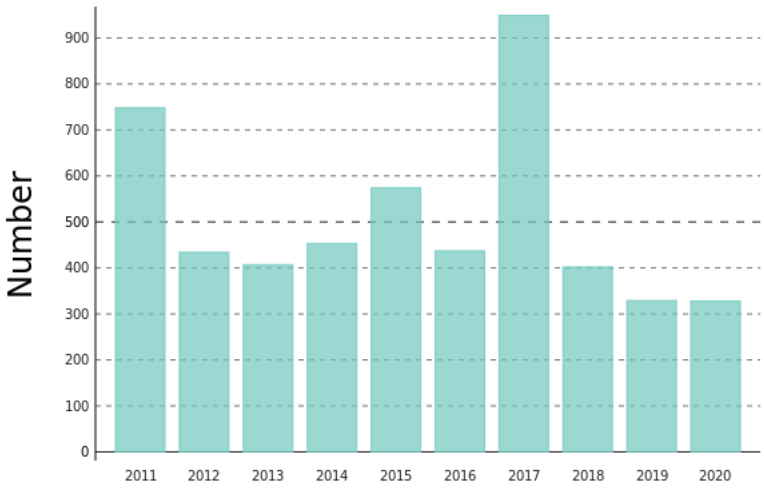


Figure 35: Proportion of PLHIV newly enrolled in HIV care with active TB disease and started on TB preventive therapy, Malaysia (2012 – 2020)



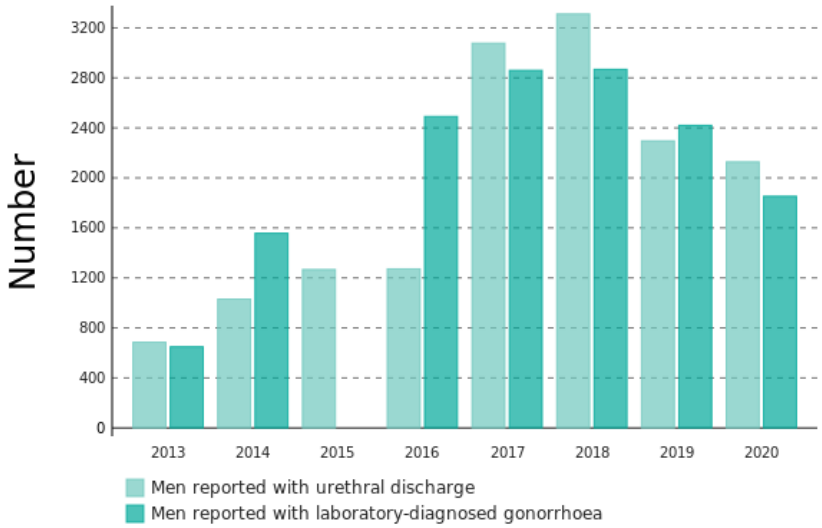
10.1 Co-managing TB and HIV treatment, Malaysia (2011-2020)

Figure 36 Number of HIV-positive new and relapse TB patients started on TB treatment during the reporting period who were already on antiretroviral therapy or started on antiretroviral therapy during TB treatment within the reporting year



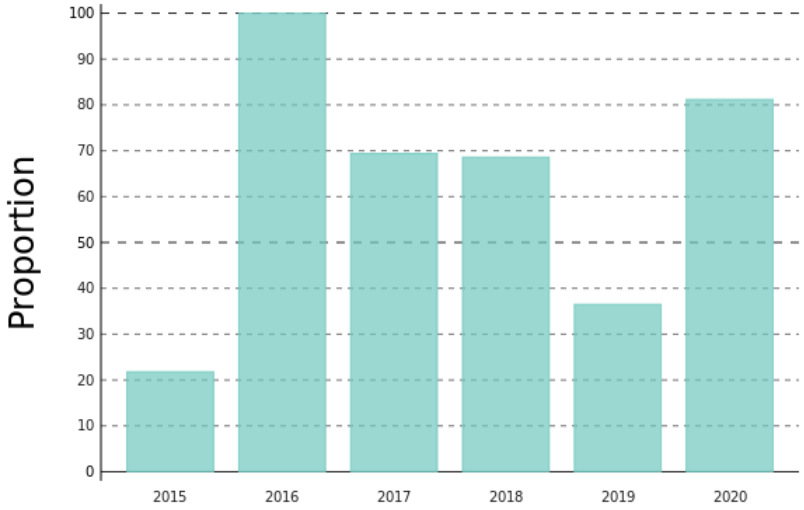
10.4/10.5 Sexually transmitted infections, Malaysia (2013-2020)

Figure 37 Number of men reporting urethral discharge and laboratory-diagnosed gonorrhea in the past 12 months



10.6 Hepatitis testing, Malaysia (2015-2020)

Figure 38 Proportion of people starting antiretroviral therapy who were tested for hepatitis C virus (HCV)



9. The Way Forward

In realizing SDGs through ending AIDS, full operationalization and effective implementation of national, sub-national and local development plans was initiated to achieve the target of reducing number of new HIV cases. With all the initiatives, HIV infections has declined from peak in 2002 (28 per 100,000) to a plateau since 2009 (11 per 100,000). At the end of 2020, HIV new case notification was at the level of 9.3 per 100,000 population.

However, to ensure Malaysia vision of ending AIDS by 2030, successful implementation is dependent on identifying undiagnosed individuals, linking and retaining them in care. The current HIV treatment cascade demonstrated there is still gaps and challenges that need immediate attention for Malaysia reaching zero through fast tracking (2016-2020) and Ending AIDS (2021-2030). Among the challenges are:

1. Expansion of HIV testing services at the community level i.e. CBT and self-testing
2. To reduce the treatment gap to reach the second 90. It is crucial to find an innovative and practical ways to reduce the time of diagnosis to initiating treatment especially when diagnosis and HIV care taken place in different setting.
3. Changes in HIV landscape in Malaysia from injecting drug use to sexual transmission. There is a need to mitigate sexual transmission of HIV among KP by emphasize on changes of risk behavior among (persistent condom usage and reducing substance abuse prior to sex).

Main activities planned for 2021 to address some of these challenges are:

1. Updated Maternal-To-Child Transmission of HIV & Syphilis protocols
2. Stigma and discrimination reduction initiatives

Update national guideline on Prevention of Mother-to-Child Transmission of HIV & Syphilis

The new PMTCT guideline (due to be published and disseminated by the Ministry of Health Malaysia in 2021), which provides all levels of healthcare workers with latest recommendations in care of pregnant mothers infected by HIV and/or Syphilis, includes advances in treatment and laboratory testing that minimizes the risk of vertical transmission. Therefore, mothers have safer and more varied options in family planning, methods of delivery as well as feeding their infants.

Information from the new PMTCT guideline will also be translated into infographics for easy reference of expectant mothers.

5.2 Stigma and discrimination reduction initiatives

The Ministry of Health is piloting strategies to reduce stigma and discrimination experienced by PLHIVs in health settings. The intervention package includes improved quality of care via: people-centred care delivery, knowledge management, decision support. These will be implemented at selected hospitals and health clinics in 6 states namely: Penang, Sarawak, Kuala Lumpur, Selangor, and Johor. The outcome will be measured continuously to inform subsequent quality improvement strategies toward achieving less than 10% of PLHIV and key populations experience stigma and discrimination by 2025.

10. The National HIV Programme and the COVID-19 Pandemic

The COVID-19 epidemic has affected Malaysia's progress towards achieving the 90-90-90 goal by 2020 in many ways: HIV testing saw an eight percent reduction in 2020 compared to the same period in 2019. It follows that new HIV notification rate in 2020 has also reduced compared to 2019, despite statistical modeling that projected continuous increase in cases up to 2030. This reduction in reported HIV new cases might be the consequence of multiple factors other than simple reduced testing activities: prolonged and repeated lock downs might have decreased risky behaviour and led to possibly reduced HIV transmission.

In contrast to the lower HIV notification rate, treatment coverage unfortunately became one of the negative externalities that arose due to COVID-19 and lockdown measures. Appointments had to be spaced out for all patients, and ART initiation delayed for those newly diagnosed. Furthermore, outreach workers were unable to deliver treatment related packages to key populations due to restrictive movement measures.

Negative effects of COVID-19 response could also be felt in laboratory services, for example rapid, point-of-care testing for HIV viral load. Reassignment of staff and analyzer machine for COVID-19 testing indirectly reduced the efficiency of data collection and reporting.

In summary, the COVID-19 could unwind previous hard-earned progress in expanding ART coverage among PLHIVs as well as quality treatment outcome monitoring. Impacts of COVID-19 pandemic on the HIV programme is likely to extend until several years to come, threatening to derail our national goal of ending AIDS by 2030.