Myanmar study visit & participation in the 22nd International AIDS conference

The Netherlands, 20-27th July 2018
A delegation of senior health officials, government officials, development professionals and parliamentarians visited the Netherlands in July 2018. The purpose of the visit was to participate in a 2-day study visit to understand the Netherlands policy and Harm Reduction approach to drug use and its health and other consequences, followed by participation in AIDS 2018 – the 22nd international AIDS Conference. (See Annex A: Delegation members)

The study visit was organized by UNAIDS in collaboration with the National AIDS Program, UNODC, Medecins du Monde and Asian Harm Reduction Network. Funding support was primarily from the 3MDG Fund and also from USAID. Arrangements in the Netherlands were made by the Trimbos Institute which is a WHO Collaborating Center. https://www.trimbos.org/about-us/mission-vision

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I. Introduction

**Study Visit:** Day 1 was in The Hague, visiting Trimbo Institute and community-based hard reduction programs for people who inject drugs. Day 2 was at KIT – the Royal Tropical Institute in Amsterdam and was a discussion of drug policy in the Netherlands and globally.

**Netherlands Drug Policy:** Though famous for its coffee shops, where cannabis can be purchased and consumed, the Netherlands has accomplished many enviable public health outcomes through its drug policy. These include low prevalence of HIV among people who use drugs, negligible incidence of heroin use, lower cannabis use among young people than in many stricter countries, and a citizenry that has generally been spared the burden of criminal records for low level, nonviolent drug offenses.

“Coffee Shops and Compromise: Separated Illicit Drug Markets in the Netherlands” tells the history of the Dutch approach and describes the ongoing success of the country’s drug policy. This includes the impact of the Dutch “separation of markets,” which potentially limits people’s exposure and access to harder drugs. Though coffee shops have traditionally commanded the most media attention, the Netherlands also pioneered needle exchange and safer consumption rooms, decriminalized possession of small quantities of drugs, and introduced easy-to-access treatment services.

These policies, coupled with groundbreaking harm reduction interventions, have resulted in the near-disappearance of HIV among people who inject drugs and the lowest rate of problem drug use in Europe¹.

**Summary of the Key Principles of the Netherlands Drug Policy and recommendations for Myanmar²:**

- Develop an Integrated, comprehensive drug response based on evidence, health and human rights; the drug policy has to fit the characteristics of the country.
- Be fact-based: recognise and respond to the Importance of research, evaluation and monitoring
- Drug problems are primarily a (public) health issue
- Fully utilise health promotion and harm reduction key concepts in effective demand reduction efforts
- Pragmatic rather than principle-based – ‘do what works’

**Treatment and care principles:**

- Accessibility and differentiation
- Comprehensive treatment offer
- Cooperation between addiction care sector, general health care sector and judicial authorities
- Effective and evidence-based care

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² See Annex B for a more detailed summary
Drug prevention - an integrated approach:
The Netherlands’ drug policy includes a comprehensive approach to the following:

- Different life areas of young people: school, home and leisure time
- Different elements: knowledge, attitudes, social norms, life skills
- Different target groups: young people (10-25 y) and intermediaries (teachers, parents, others)
- Different substances: legal and illegal substances
- Integrated in broad framework: health promotion, lifestyle, youth culture

Drug demand reduction - an integrated approach: Understanding demand reduction as comprehensive, integrative and stepped approach including:

1. Preventing use
2. Preventing health incidents
3. Early detection and brief interventions to prevent addiction
4. Treatment of addiction and problem use
5. Harm reduction
6. Social rehabilitation and reintegration

Global directions towards a more balanced approach:

- More health-centered, less imprisonment
- Explore alternative sanctions, regulations
- More attention for Harm Reduction
II. AIDS 2018

Breaking barriers and building bridges; informed by the Sustainable Development Goals (SDGs) pledge to leave no-one behind.

AIDS 2018 was an incredibly important opportunity for people affected by the disease, key affected populations, health activists, governments, development partners, donors, senior government, UN and civil society leaders to learn from each other about what is working globally in the areas of HIV, Sexual and Reproductive Health and Rights, effective integrated responses and upholding key global principles of inclusion, equity and human rights, including the right to health.

Breaking barriers and building bridges: towards sustainability of the AIDS response in South-East Asia

This session was the first opportunity for sharing globally from South-East Asia and by Myanmar with the world.

It was chaired by Eamonn Murphy, UNAIDS Thailand. Presenters included the following:

- Dr. Panumard Yarnwaisakul, Deputy Director-General of Disease Control, Ministry of Public Health, Thailand
- Ms Kay Thi Win, Regional Coordinator, Asia-Pacific Network of Sex Workers
- Dr Ronnin Pagtakhan, LoveYourself, Philippines
- Mr Tengku Surya Mihari, GWL-INA, Indonesia
- Professor Dr. Thet Khaing Win, Permanent Secretary, Ministry of Health & Sports, Myanmar
- Dr. Tia Phalla, National AIDS Authority, Cambodia
- Dr. Anung Sugihantono, Director-General Disease Prevention and Control, Ministry of Health, Indonesia
- Dr. Nguyen Hoang Long, Director General, National AIDS Authority, Vietnam
- Dr Alisra Tatakorn, Director of AIDs, TB, STI control, Bangkok, Thailand

In line with the theme of the 22nd International AIDS Conference (AIDS 2018), “Breaking Barriers, Building Bridges”, the satellite symposium highlighted working models for key populations with a focus on approaches from South-East Asian countries including Cambodia, Indonesia, Myanmar, Philippines, Thailand and Viet Nam. These countries have many similarities in their epidemic profile and this session provided a platform to share best practices that could be adapted and contextualized in other settings. This session explored innovations for, and practical solutions to issues related to countries transitioning to middle-income status, and therefore away from traditional sources of donor funding. Each country presenting was represented by government officials and/or community-based organizations and each detailed innovation in service delivery, and how they have built the strong political commitment required to achieve integrated, inclusive, and sustainable multisectoral responses.
The Amsterdam Affirmation: People, Politics, Power

Much has changed since the global HIV community convened at the previous International AIDS Conference in Durban in 2016. Advances in science have been significant, including widespread acceptance that HIV is untransmittable with an undetectable viral load, increased PrEP rollout, innovative treatment delivery methods and promising developments in cure and vaccine research. However, while there have been success stories, prevention efforts continue to lag and new HIV infections are still on the rise among key populations and young women and girls. These groups continue to experience high levels of structural violence and stigma. Coupled with a rising tide of populism, questionable political commitment and leadership and declining financial resources, the HIV response is operating in a fragile environment. People, politics and power lie at the heart of the AIDS epidemic. How these intersect will continue to be critically important in achieving the agreed global targets and universal health coverage.

Supporting sustainability

1. Inform the global health agenda: Silos in service delivery for co-infections, including STIs, TB and viral hepatitis, and co-morbidities remain. Breaking these down opens under-utilized opportunities to improve health outcomes and scale up integrated, people-centred approaches within the framework of universal health coverage that could strengthen health outcomes for millions more. But to end these epidemics, access to quality and affordable essential medicines, diagnostics and vaccines for all will be critical.

Non-communicable diseases like diabetes and hypertension will also require synergistic responses.

2. Scale up evidence-informed programming: In the face of a growing “anti-science” agenda, including the expansion of the global gag rule, the role of science continues to be central. Programmes must be pragmatic, responding to individuals’ lived realities and addressing the local epidemic informed by quality data. Prevention programmes that are targeted at the national, regional and community levels will be essential. Common to all must be harm reduction, comprehensive sex education and sexual and reproductive health programmes that include PrEP and PEP.

3. Increase political commitment: Strengthening political commitment and securing financial and human resources will be key to accelerating scientific research towards preventative vaccine strategies, long-acting and injectable PrEP and HIV cure research, as well as ensuring that solid pharmacovigilance systems are in place. Moreover, political will and commitment is necessary to scale up domestic resources for prevention and treatment and to change prohibitive drug policies into enabling environments that ensure access to harm reduction.

Ending exclusion

1. Focus on key populations: Gay men and other men who have sex with men, people who inject drugs, people in prisons and other closed settings, sex workers and transgender people continue to be disproportionately affected by HIV. Enabling environments must be created through affirmative and
empowering education, workplace and social protection programs, including promotion of the GIPA principle and the removal of laws, policies and practices that criminalize and continue to stigmatize, marginalize and discriminate against key populations.

2. **Promote gender justice and sexual rights:** Gender inequalities make young women and girls especially vulnerable to HIV. Efforts to achieve gender justice for women in all their diversity must include gender-transformative approaches that have impact at societal levels, integrating HIV and sexual and reproductive health and rights into programs, addressing coercion and gender-based violence, and engaging men and boys in innovative ways to advance gender equality.

3. **Address needs of priority populations, including migrants and indigenous people:** A lack of access to healthcare services, limited social protection and increased social exclusion are just some of the factors that contribute to the heightened vulnerability to HIV experienced by migrants, refugees, indigenous people and racial minorities. Structural barriers to HIV-related services must be addressed, including through effective cross-border health services initiatives, bringing mobile clinics into remote communities and challenging perceptions of “health tourism”, particularly in conservative settings.

**Amplifying advocates**

1. **Invest in front-line healthcare workers:** Increased investments must be made in healthcare workers, including their hiring and pre- and in-service training, to ensure that they can provide quality and client-centred care, especially to adolescents and young people. Front-line and community healthcare workers, in particular, should also be front and centre in advocating for universal health coverage and health systems strengthening to increase access to comprehensive HIV and other health services for all.

2. **Strengthen community responses:** Where activists, advocates and service providers are being sidelined, their place in holding political leaders to account must be reaffirmed. The community space in delivering services must be adequately resourced, supported and sustained in all country contexts, particularly where governments are not able or willing to provide services or where civil society is sidelined.

3. **Support human rights defenders:** Increasingly, the HIV community, including researchers and the next generation of young leaders and advocates, needs to find common ground with, and mobilize in support of, other coalitions that inspire broader societal change, such as campaigns calling for an end to sexual violence. Standing together with other movements will be a way to change and challenge cultural norms, perceptions and practices to overcome the pervasive stigmatization and discrimination that people living with and affected by HIV face.

We, the undersigned, reaffirm our commitment to supporting sustainable and synergistic programming, promoting inclusion and amplifying the voices of a wide range of advocates, including scientists, researchers and civil society, to ensure that the most vulnerable and marginalized are not left behind in the HIV response. Despite prevailing conservative ideologies that bring
significant funding and implementation challenges, we must seize the opportunity in Amsterdam to build bridges towards a more dynamic, inclusive and multi-sectoral response. HIV has taught us fundamental lessons about humanity, and we must not forget these lessons at this critical crossroads in the HIV epidemic where we have the opportunity to build on progress to date or risk losing the gains we have made.

We must not be gagged. Now, more than ever, we need people, politics and power to come together to deliver a more just and inclusive response.

Sign the pledge yourself at: http://www.aids2018.org/Get-Involved/Take-part/The-Amsterdam-Affirmation#AmForm

A snapshot of key issues, findings and implications for the response to HIV globally and in Myanmar

**Reaching key populations:** Peter Piot, founding director of UNAIDS, reminded the audience that the 90-90-90 targets set by UNAIDS in 2014 will miss 27 percent of HIV patients. He said the remaining 10-10-10 — people who will determine the future of the epidemic — are likely to be key populations less likely to access services because of barriers such as stigma and criminalization, including LGBT individuals, people who use drugs, sex workers, and young people.

**The prevention crisis:** Prevention has traditionally received little HIV funding, but there was new buzz around the prevention agenda, in part driven by excitement around oral pre-exposure prophylaxis.

**The youth bulge:** Adolescents face a disproportionately high risk of becoming infected with HIV, especially in Africa, where the population is set to rapidly increase and new infection rates are on the rise among adolescents.

**Integration:** While HIV programming has traditionally been siloed due to having its own funding streams, the conversation has turned toward integrating HIV programming into broader health care. This was a key point in The Lancet Commission Report, in the message delivered by WHO chief Tedros Adhanom Ghebreyesus, and alluded to by former President Bill Clinton.

**Concerns remain for vaccines:** Concerns about the so-called “wonder drug” dolutegravir sparked debate among conference goers about whether women of childbearing age should be prescribed the drug; we also saw new data from the APPROACH study, which is evaluating the safety of several different HIV vaccines currently undergoing clinical trials.

**The Trump effect:** The shadow of U.S. President Donald Trump’s beefed-up *global gag rule,* also known as the Mexico City Policy, loomed large. Unlike previous iterations of the policy, Trump’s version is applied to almost all U.S. global health assistance, including PEPFAR (the United States government initiative to address HIV/AIDS globally).

**The response to the worst epidemic the world has ever seen is a powerful global public good:**

- Solidarity
- Transnational and national alliances across constituencies, sectors, countries
Unprecedented mobilization for a rights-based, people-centred response:

- People
- Resources
- Laws and policies

Persistent challenges

- New HIV infections not decreasing quickly enough
- 47% of new HIV infections in key populations and their sexual partners; 33% in young people
- Structural determinants and risks
- Growing inequalities
- Funding: donor funding and domestic financing
- Challenges faced by civil society
- New HIV infections among people who inject drugs increased 33% from 2011-2015
- Donor funding for harm reduction services has fallen 24% since 2007

“We are not on track to end the HIV pandemic, and the discourse on ending AIDS has bred a dangerous complacency” - Peter Piot – IAS Lancet Commission

- The narrative that we are close to ending AIDS was challenged.
- Sustainable Development Goals are relevant and enable UHC to address intersectionalities, social determinants, and vulnerability to HIV.

Law & Justice

- The Law, informed by science and grounded in human rights, is a powerful tool to drive inclusion and justice.
- Global need to repeal laws and practices based on scientific ignorance, bias and irrationality which are impeding effective HIV responses and wasting money.

Threats or opportunities - multilateralism

- A new era of inclusive global cooperation is possible through the 2030 Agenda for Sustainable Development, the Sustainable Development Goals (SDGs) and the pledge to leave no-one behind.
- New partnerships to address intersectionality: to bring new voices to the table.
- Credible and responsible leadership to deal with multiple protracted crises and challenges such as migration and xenophobia.

The way forward - the AIDS movement must embrace and drive the 2030 Agenda

- Keep AIDS high on the agenda
- Drive meaningful integration (The Lancet – IAS Commission)
- Build a broader movement/coalition for health, well-being and equality

Political environment and shrinking spaces for activism

- Emergence of political environment and forces that are anti-women, anti-migrant, racist, homophobic, anti-key populations – this “othering” is the core of their ideology.
- Shrinking space for civil society is a reality of our times (US, Russia, Hungary, Kenya, Venezuela …)
- Emerging experiences of resistance and new tactics to overcome the new political environment.
- Human rights programming and advocacy should be funded, not to belong to the “1% club”. Donors should fund emergency support and invest more in advocacy.

“When they try to silence us because our voices have travelled and amplified our spaces, we know we are doing something right” – Shaun Mellors, International AIDS Alliance

**Financing and sustainability**

- Projected funding is not sufficient to even sustain the current level of response.
- Middle income country challenge as donors retreat.
- Increasing expectation that domestic funding is the solution (illusion?)
- But key populations and communities are unlikely to get funding from domestic sources.
- Treat the world: Work united across diseases for quality and affordable treatment for all.

“Pharma is still acting as an organized crime (Global Village). Their undue high profit could be enough to cover global funding gaps for AIDS, TB and hepatitis”. (Andrew Hill)

**Eastern Europe and Central Asia (EECA)**

- Why EECA: growing incidence, mortality and prevalence
- 95% of new cases are among new populations and their partners.
- Less than 40% of people receive ARV treatment
- Different countries – different paths.

**Ministerial policy dialogue on HIV and related comorbidities (NL/WHO/UNAIDS)**:

- Progress in the elimination of vertical transmission, increased domestic investments and creating efficiencies but work in progress when it comes to serving and investing in communities and key populations.
- More regional dialogue and learning from each other needed.

**Failing people who use drugs**

“People Who Inject Drugs is the only key population where life expectancy has declined over the last years.” – M.J. Milloy, B.C. Centre of Excellence in HIV/AIDS, Canada.

- Failing the targets (33% increase instead of 50% reduction of new cases by 2015).
- Overreliance on biotechnological technologies; little in terms of community-based approaches and literacy.
- Drug control is taking lives – the Philippines and other countries.
- Investment: Just 13% of the funding needed is available outside of high income countries (Harm Reduction International 2018)
- 75% of the drug control budget could fund the harm reduction gap
III. Recommendations from the Myanmar delegation

A series of recommendations were made by the delegates from Myanmar, arising from their participation in the UNAIDS-Trimbos Institute-organised study visit as well as participation in AIDS 2018. These include the following.

Recommendations provided at a meeting of the Myanmar Delegation at AIDS 2018, chaired by the Permanent Secretary of MOHS on 25th July:

1. Parliamentarians encouraged enhanced advocacy and engagement to the parliament as that will be useful in the budget allocation discussion. They emphasised the need and benefit of continuous engagement to strengthen cooperation between the Government, NGOs and policy makers.

2. Partners stressed the importance of youth programs to the prevention and reduction of HIV and sexually transmitted and reproductive problems. This includes establishing youth-friendly clinics with SRH services, promoting integrated testing – HIV, HCV, STI and TB - for PWID, maximising early HIV, HCV and TB treatment initiation, strengthening the national response to HIV and related harms in Sagaing, and more comprehensive implementation research.

3. Myanmar Positive Group raised the issue of promotion of community-based HIV testing (screening test), support of parliamentarian in newly drafted Intellectual property law.

4. CCDAC (Central Committee for Drug Abuse Control) welcomed input into the development of by laws for the revised drug law and the new National Drug Policy.

5. Drug treatment demand extended harm reduction and OST services in Kachin and Sagaing, and overdose management in those regions.

6. Prison health department expressed the need for human resources for prison health and requested regular physicians visit to prisons for medical care. (Prison health SOP has recently been approved by both the Ministry for Health & Sports, and the Ministry for Home Affairs.)

7. UNAIDS highlighted the need to support formal and informal leadership at all levels in supporting access to effective prevention and treatment for all who need them including PrEP, sexual health and rights accessible to youth and Key Affected Populations.

Recommendations arising from AIDS 2018 sessions:

1. Strengthen and expand access to all types of testing and combination prevention in partnership with key

See details in the following three sections of A, the Global response – key dynamics, B. the Context – rights, fundings, civil society partnership supporting the response, and C. treatment and clinical issues.
affected populations and community based and focused organizations.

2. Accelerate, expand and strengthen access to Hepatitis C testing and treatment, especially among key affected populations.

3. Initiate major efforts to reduce infections in youth, adolescents and children.

4. Initiate targeted prevention and access to testing and treatment for mobile and migrant populations.

5. Consider further implementation of international standard operating procedures for health in prisons, including the comprehensive package of 15 interventions proposed by UNODC, UNAIDS and WHO\(^4\) which are essential for effective HIV prevention and treatment in closed settings.

6. Better cooperation between Ministries of Health, Justice and Home Affairs, as well as supporting civil agencies, is encouraged to more effectively and usefully connect the prison system with the general health system, to support disease prevention and control within closed settings and in the broader population, to avoid costly double standards, to make best use of (normative) guidelines and standard operating procedures and to support appropriately-trained, and clinically supervised health personnel carrying out their health-related work in closed settings with all people in detention – including prisoners and prison staff.

7. Consideration be urgently given to developing self-testing policies to reach the UNAIDS 90-90-90 targets and accelerate entry to HIV care and prevention among underserved populations.

8. Recognise the combination focus and role of NGOs working with key affected populations in harm reduction, expanding access to testing and treatment, identification and protection of human rights and working to sensitize and mobilise local communities to understand and support this.

9. Engage with donors and governments to identify mechanisms to mobilise and channel domestic and external funding and technical assistance to prevention, human rights support and community sensitization and mobilization in order to support especially key affected populations and people affected by HIV.

10. Support parliamentarians understanding and support for interdisciplinary policies and programs strengthening rights-based access to prevention and treatment.

11. Collaborate with specialists in designing context-specific training, immersion and community attachment to promote understanding, empathy and compassion by healthcare workers and reduce stigma and discrimination.

12. Development partners and technical organisations should provide assistance to the Union Parliament Health & Sports Committee to understand the health status of people in Myanmar and to develop policy and program briefs on ways to strengthen the health status of people in Myanmar.

\(^4\)UNODC. *HIV prevention, treatment and care in prisons and other closed settings: a comprehensive package of interventions.*

http://www.who.int/hiv/pub/prisons/prisons_packa ge.pdf
13. Support early initiation and expanded access to PrEP and ART as part of combination prevention, especially with key affected populations and their sexual partners.
14. Expand reach of comprehensive harm reduction services including access to HCV testing and treatment to reach majority of people who injects drugs.
A. The global response: key dynamics

**Recommendation:** Strengthen and expand access to all types of testing and combination prevention in partnership with key affected populations and community-based and focused organisations.

1. HIV elimination in gay men – what is working?

Substantial decreases in HIV diagnoses in key cities show the way to elimination of new HIV diagnoses in gay men, a workshop at AIDS 2018 in Amsterdam heard on Tuesday. Public health officials, clinicians and community leaders presented data from Sydney, London and New York which all showed remarkable declines in new HIV diagnoses amongst gay men. Yet each city also highlighted groups which had benefited more and less from this decline, giving clues to ways in which a combination prevention program could be optimised and targeted.

Key factors the cities shared included increased rates of testing, both lifetime and frequency; coordinated and promoted testing campaigns; improved real-time data flow and quality; stakeholder engagement, including clinics and communities; earlier treatment access and availability of pre-exposure prophylaxis (PrEP). Political leadership at all levels was also highlighted.

For Sydney, Andrew Grulich of the Kirby Institute presented data showing that the average number of HIV tests per year by men who have sex with men (MSM) at high risk of acquiring HIV increased from 1.79 to 3.44 between 2011 and 2016, while the percentage of MSM on treatment within six months of diagnosis rose from 60% in 2013 to 97% in 2017. For London, Valerie Delpech of Public Health England showed that while the perceptible decline in new MSM diagnoses was first noticed in central London clinics in 2016, by using CD4 back-calculations, the decline in new infections can be traced back to 2013. This coincided with a substantial increase in community testing campaigns and earlier treatment, while the emergence of unofficial but widespread PrEP use amongst gay men from 2016 accelerated the trend.

Charles King of Housing Works presented New York data showing a 16% increase between 2007 and 2016 in those who had ever had an HIV test and a level of 77% (of those diagnosed) having suppressed viral load in 2016. Testing frequency and time to treatment also improved. Each presenter credited political leadership, including changes in both Sydney and London which re-energised central planning and service co-ordination.

“The role of community and civil society has been critical,” said Valerie Delpech.

However, divergences in which groups benefited most also gave pointers to potential problems. In all three cities, the decline was most pronounced in central urban districts where gay community engagement was greatest; in Sydney this was a remarkable 52% in the city centre compared to only 7.3% in the suburbs. This suggested that
community attachment and cohesion may play a role. New York saw a much greater decline in onward transmissions amongst people injecting drugs than amongst MSM, though it was unclear whether chemsex played a role within this. In Sydney, the decline was only amongst Australian-born MSM, while foreign-born MSM saw a small but continuing increase in the level of diagnoses. Valerie Delpech suggested that the change to genuinely universal access to free HIV treatment in England had played a part in their success amongst all groups, including undocumented migrant MSM. However, England’s continued failure to provide free access to PrEP, except for those on the IMPACT trial from late 2017, was noted.

“Testing is a vital tool whether the result is positive or negative,” stated the UK’s Professor Jane Anderson, pointing out that a negative result is also an opportunity for intervention.

“Viral suppression is the foundation for ending HIV,” – Charles King.

Andrew Grulich talked about the importance of having rolled-out PrEP in one year to 25% of all sexually active MSM in New South Wales. But each continent’s experience gave clearer clues than ever to how HIV might be eliminated, at least amongst those at greatest risk in cities. Combination knowledge, alongside combination prevention, may be the answer.

2. HIV outbreaks in people who inject drugs shows that ‘complacency is the new problem’

There have been outbreaks of rapid HIV transmission among people who inject drugs in Athens, Bucharest, Dublin, Glasgow, Luxembourg, Tel Aviv, Saskatchewan (Canada) and Scott County (Indiana, USA) since 2011. However, according to a group of public health officials at AIDS 2018, these have all occurred in settings where enough resources should be available to prevent outbreaks.

“Complacency for HIV prevention is emerging as an important threat to the success of combined HIV prevention for people who inject drugs,” they say.

Combination prevention for people who inject drugs consists of needle and syringe programmes, opioid substitution therapy and HIV treatment. In settings where it has been implemented at scale, it has prevented epidemics. The authors call for lessons to be learnt from these outbreaks.

The largest outbreaks have been in Bucharest and Athens, with around 1100 new infections at each site. Some have been much smaller but occurred in settings where combination prevention had previously been keeping the situation under control; Dublin used to have less than 20 cases a year, but had 57 diagnoses in 2014-2015. The numbers in Glasgow, Luxembourg and Saskatchewan are comparable. Very few harm reduction services were available in Athens. In Scott
County, providing needle and syringe exchange was illegal, while opioid substitution therapy and HIV treatment were not locally available. Due to the Global Fund’s withdrawal from Romania, many needle and syringe programmes had closed down in Bucharest. Significant economic downturns and recessions preceded the outbreaks in Athens, Dublin and Scott County.

The outbreaks particularly affected homeless individuals in Athens, Glasgow and Dublin. Women made up a significant proportion of the cohorts in Luxembourg and Dublin. Other marginalised groups were affected in Saskatchewan (indigenous people) and Athens (migrants). Changes in patterns of drug use may have led to high risk injection risk behaviour in several settings. In Bucharest, Tel Aviv and Dublin, new stimulant psychoactive drugs including synthetic cathinones (mephedrone and related drugs, sometimes referred to as ‘bath salts’) became popular. In Luxembourg, the drug market changed with the aggressive introduction of crack cocaine and less availability of heroin.

In each setting, public health bodies have expanded the availability of prevention interventions, but complete coverage has not always been achieved. HIV transmission has continued in most settings, with the outbreaks ongoing in Glasgow and Saskatchewan. The number of new cases has not returned to pre-outbreak levels in any of the sites, except Tel Aviv. The authors stress the importance of achieving high coverage of combination prevention, maintaining it, and adapting services in response to changing patterns of drug use. Particular attention should be paid to people who inject stimulants (such as cocaine and new psychoactive substances), communities undergoing economic difficulties and homeless injectors.

3. High rate of hepatitis C infection in Amsterdam PrEP programme

**Recommendation:** Accelerate, expand and strengthen access to Hepatitis C testing and treatment, especially among key affected populations.

Regular hepatitis C testing among the HIV-negative gay men and other men who have sex with men (MSM) participating in the Amsterdam PrEP demonstration project (AmPrEP) has revealed high rates of hepatitis C infection passed on through sex. The rate of re-infection in men already treated for hepatitis C was even higher.

AmPrEP started in August 2015 and will continue to December 2020. The project has recruited 374 MSM and two trans women and offers them a choice of daily or event-driven HIV pre-exposure prophylaxis (PrEP). Participants are tested for hepatitis C every six months. There was already a quite high prevalence rate of 4.8% for hepatitis C when people joined the project. There were 12 new hepatitis C infections diagnosed up to December 2017, indicating an annual incidence of about 1%. This is quite typical of rates of sexual hepatitis C infection among HIV-positive gay men – but it has not been seen in HIV-negative gay men before.

Of the 12 hepatitis C infections, six affected men had been previously cured of hepatitis C. The annual incidence rate for re-infection was an extraordinarily high 25.5% a year. AmPrEP principal investigator Elske Hoornenborg
commented that sexual health information and encouragement to avoid behaviours that may spread hepatitis C were important but frequent testing and immediate hepatitis C treatment were probably the only way to bring down the rates of circulating hepatitis C in the gay community.

4. Progress against HIV in young people lags behind

Progress lags behind in young people as Africa’s youth population grows and infection spreads among adolescents and children globally - especially connected to key populations

**Recommendation:** Initiate major efforts to reduce infections in youth, adolescents and children.

Africa is far off track in reducing new HIV infections among children and young people and is unlikely to reduce new infections in young people substantially before 2030 due to an anticipated doubling of the adolescent population, according to findings from a UNICEF modelling exercise presented on Thursday at AIDS 2018.

The study looked at what will happen as the population of children and adolescents grows in sub-Saharan Africa over the next few decades. While populations age in other parts of the world, notably in Europe and Asia, Africa will experience a ‘youth bulge’, with the population of adolescents and young people aged 15 to 24 living in sub-Saharan Africa set to almost double by 2050, while remaining stable or declining in every other region of the world.

HIV incidence among young women remains high and incidence is estimated to have declined by only 3% a year among young people since 2010. As the population of young people grows, the total number of young people living with HIV will also grow unless there is a greater and more sustained reduction in HIV incidence among young people. To examine the impact of this demographic transition on HIV in young people, UNICEF took data from UNAIDS HIV estimates, UN population projections and other validated sources to develop projections of HIV incidence and prevalence until 2050 for 141 countries, including 46 countries in sub-Saharan Africa.

The findings were presented by Aleya Khalifa of UNICEF. The model compared outcomes for two trends: the current trend in HIV incidence and antiretroviral coverage, and what might happen if the Fast Track goals for reducing HIV incidence and treatment coverage by 2020 (81% coverage) and 2030 (90% coverage) are achieved. The model also compared trends in treatment coverage for prevention of vertical (mother-to-child) transmission, based on the current trend or achievement of the Fast Track targets by 2020 (75% coverage) and 2030 (95% coverage). The study found that if current trends prevail, although the number of new infections in children under five years of age will fall by half by 2030 to around 140,000 per year, new infections in adolescents (aged 15 to 19) will not be halved until 2050 and will still be running at a rate of approximately 200,000 per year in 2030.

But the study also found that countries are far from reaching the 2020 targets, let alone the 2030 targets, implying that the ‘current trend’ scenario is highly likely to play out unless major efforts are made to reach adolescents and prevent new infections in children. Based
on current trends, new infections in children will fall by only 42% by 2020, rather than the 95% goal set by international agreements. The model finds that 1.9 million children and adolescents will be living with HIV by 2030, falling to 1 million by 2050. Similarly, new infections in adolescent girls aged 15 to 19 will fall by only 28%, while infections in boys will fall by only 25%, far short of the 75% reduction envisaged in the Three Frees framework for an AIDS-Free Generation. Aleya Khalifa said these projections “really should serve as a warning.”

The study also found that the impact of achieving Fast Track goals for treatment coverage would be most pronounced for new infections in adolescents. Whereas on the current trend, new infections among adolescent girls would fall by 42% by 2030, new infections would fall by 83% by 2030 if 90% treatment coverage could be achieved. A similar reduction in new infections could be achieved among adolescent boys.

Although the study found that, overall, new HIV infections will decline by 70% in Eastern and Southern Africa by 2050, no country in sub-Saharan Africa can expect to reduce new infections by 95% among adolescents and young people by 2030. Based on current trends and levels of prevention activities, UNICEF estimates that almost 10 million adolescents and young people will be infected with HIV between 2017 and 2050. Two-thirds of these infections will occur in young women. The study estimates that only Botswana, Mozambique, Swaziland, Uganda and Zimbabwe will be able to achieve a 95% reduction in new infections among adolescents and young people by 2050. The share of new infections occurring in Western and Central Africa will grow, partly because of an especially fast increase in the child population in the region, but also because of slow progress towards the 2020 targets.

5. HIV treatment services need to adapt to serve mobile and migrant populations

Recommendation: Initiate targeted prevention and access to testing and treatment for mobile and migrant populations

Health facilities must be responsive to the needs of mobile individuals and of migrants if they are to retain people in care, Bwalya Chitika of Zambart said at AIDS 2018. Lifelong engagement with care is required for good individual and public health outcomes, but the rigidity of many health services in African countries is a barrier.

“It is crucial to integrate the dimension of mobility and migrations into our responses to the HIV epidemics,” Joseph Larmarange of the Centre Population et Développement (CEPED) said at the same session. If health is seen as a human right, this must apply to mobile and migrant populations too.

Larmarange is one of the social scientists who have been working in the settings of ‘universal test and treat’ studies in African countries to understand the social context and social impact of these interventions. Mobility and migration has emerged as a key theme – the reality of many people’s lives is that people often need to travel in order to create or find work. Examples include women selling vegetables 100km from their home,
street vendors in peri-urban settings, construction workers travelling to urban areas, cross-border traders and people working in domestic service in a neighbouring country. Movement within countries and between different parts of Africa is much more common than migration to Europe. Rural-urban migration is not the only practice: circulation between rural areas, towns and the rural perimeters of cities is common.

The forms of livelihood that people are able to look for are highly gendered, with women tending to travel shorter distances and for shorter periods of time. While male migrant workers are frequently described as having sexual risk behaviour that impacts on their partners back home, an analysis from the SEARCH study in Kenya and Uganda found that concurrent sexual relationships were more strongly associated with mobility in women than in men. In KwaZulu Natal, the ANRS 12249 Antiretroviral Treatment as Prevention trial offered HIV treatment regardless of CD4 count. Repeated household surveys showed that individuals with HIV who had recently arrived in the area and people who subsequently left were less likely to be retained in care or to be taking HIV treatment. So it appears that the movement of people in and out of communities slowed down efforts to increase treatment coverage and population viral suppression. This is one factor that may explain this study’s failure to show a reduction in HIV incidence at population level.

In countries where welfare and social protection systems usually do not exist, people’s reasons for mobility are primarily to raise money for household basic needs such as food, shelter, children’s schooling and other social obligations. People are forced to make difficult choices between accessing medical care and sustaining their livelihoods. Frequently, people prioritise providing for their households and their dependents over their own health, delaying, missing or stopping treatment. Bwalya Chiti pointed out that the clinic system usually requires people living with HIV to collect their medication on a routine basis from the same location. They usually need to attend once a month, within normal working hours, and a visit can take a full day.

However, mobility creates discontinuities: an individual may be too busy to attend the clinic or may never be home during clinic opening hours. He or she may move temporarily to an area that does not have a clinic that dispenses antiretrovirals. In a new area, the individual may lack knowledge of the health facilities and how the health system works there. There may be bureaucratic barriers to obtaining medication from a facility in the new area, without registering as a new patient. When individuals miss appointments, they are often reprimanded by staff, discouraging people from remaining engaged with care and contributes to further movement of patients between services. People may seek care elsewhere to avoid being made to feel guilty by healthcare workers. Chiti argued people living with HIV need to be involved in decisions about service design. There should be a collaborative process to develop more flexible services, with for example clinic hours adjusted to allow people to attend in the evening or at the weekend.

Staff should also be trained to be more sensitive to patients’ needs concerning mobility. They should ask patients about travel plans and provide medication refills that
will cover the whole period the patient is away. Patients should be given cards with full
details of their medication, be educated on
which drugs they are taking and be given
details of alternative facilities, in case they run
out of drugs.

Better means of information sharing for
healthcare providers, both within a country
and across borders, need to be developed.
Audience members suggested that one
possibility may be for patients to carry their
own health record on their phone. At a more
basic level, clinics need to be willing to take
simple steps, such as to phone a person’s
usual clinic to check details of their
prescription. Joseph Larmorange commented
that whereas the solutions in relation to short-
term mobility seem fairly clear, it was less
obvious how to adapt services for migrants
who cross borders. During discussion, Ria
Reis of the University of Amsterdam noted
that these issues are not unique to HIV, but
are seen in relation to all chronic health
conditions. She suggested forming alliances
with people working on non-communicable
diseases, including community
representatives, providers and academics.

6. The Implementers’
Conclusions

More attention and investment towards
the evolving implementation science
agenda required

- Good examples of pragmatic impact
evaluations
- Process and formative evaluations
describing implementation
- Relatively few costing studies
- Challenges remain: few reviews, hope to
see more on Prevention Implementation

Science next time, and evidence of new
financing models

Learn from and apply key implementation
lessons

- Peers and communities critical for
prevention and treatment implementation
- Targeting and differentiation models
critical for prevention and treatment
- Intersectoral collaboration is critical and
feasible, for financing and delivery
- Data driven prevention and treatment is
rising, but systems need support

Combination and differentiated prevention
increases yield of programming

- Youth-friendly clinics led to more HIV
tests and more condoms picked up
(Rosenberg)
- Microfinance reduced physical violence
(Harvey)
- Clinic level barriers (Malebranche) – need
for research that looks at the clinical level
- High retention with community ART
groups (Mozambique) and peer mentoring
(UK).
  Most cost-effective interventions
  (condoms, Voluntary Medical Male
  Circumcision, outreach to sex workers

7. Health in Prisons

Recommendation: Consider further
implementation of international standard
operating procedures for health in prisons,
including the comprehensive package of 15
interventions proposed by UNODC, UNAIDS
and WHO\textsuperscript{5} which are essential for effective HIV prevention and treatment in closed settings, based on the principles of international law, including international rules, guidelines, declarations and covenants governing prison health, international standards of medical ethics and international labour standards.

Better cooperation between Ministries of Health, Justice and Home Affairs, as well as supporting civil agencies, is encouraged to more effectively and usefully connect the prison system with the general health system, to support disease prevention and control within closed settings and in the broader population, to avoid costly double standards, to make best use of (normative) guidelines and standard operating procedures and to support appropriately-trained, and clinically supervised health personnel carrying out their health-related work in closed settings with all people in detention – including prisoners and prison staff.

Globally, more than 11 million people were incarcerated in prisons in 2016. Over-represented among this population are the people most vulnerable to HIV, including people who use drugs, sex workers, men who have sex with men, transgender people, and others who are most marginalized in communities. Prisoners are disproportionately affected by HIV, tuberculosis, viral hepatitis and mental health issues. Despite this fact, comprehensive health services are rarely available within prisons\textsuperscript{6}.

HIV prevalence in prison is reportedly 15 times higher than in the general adult population\textsuperscript{7}. Increased disease prevalence in prison populations is recognised as a significant public health concern, both for people living and working in prisons and for the general population at large because the vast majority of people held in prisons eventually return to their communities. Yet, incarceration may represent a unique opportunity to make adequate healthcare services available to people and target groups that are usually not reached when in the community\textsuperscript{8}.

Active case finding is one of the key measures for the prevention and control of communicable diseases that should be considered for broader implementation in prison settings. It supports early diagnosis, ensures that infected people can receive early treatment and care, and thus contributes to prevent onward disease transmission. The successful implementation of evidence-based interventions in prison settings requires an in-depth knowledge of structural hurdles, individual barriers, and the characteristics and behaviours of the prison population\textsuperscript{9}.

With high incarceration levels among people who inject drugs, access to sterile injecting equipment and NSP (network service provider) services are a vital component of

\textsuperscript{5}Ibid.
\textsuperscript{6}WHO. (2017). Focus on HIV in prisons vital to end AIDS.
\textsuperscript{7}Ibid.
\textsuperscript{9}Ibid.
healthcare in prisons\textsuperscript{10}. The provision of harm reduction programmes remains extremely limited in prisons and other closed settings. In 2016, 52 countries were providing Opium Substitution Treatment in prisons, while only eight countries were implementing NSPs in closed settings\textsuperscript{11}. The lack of NSP services is particularly concerning because of the high rates of injecting drug use and the complex interaction of HIV, hepatitis and TB in prisons worldwide\textsuperscript{12}. Condoms are available to prisoners in only 28 countries, although they are accessible through programmes in community settings worldwide\textsuperscript{13}

**Health in prisons: sessions and presentations**

The below selection is not necessarily an exhaustive listing of all prison health sessions and presentations which were held during AIDS 2018, these address global issues, epidemiology characteristics, progress made in right-based public health care in prisons and lessons learned.

Bridget J Anderson et al.\textsuperscript{14} presented the longest and largest HIV and HCV seroprevalence study of an incoming population to a state prison system. The study highlighted the increasing HCV burden to correctional health and the opportunities related to addressing HCV and HIV treatment needs, both during and after incarceration.

Ariel Sernick et al.\textsuperscript{15} presented an impressive literature review published between January 2007 and February 2017, the review did show significant gender disparities in HIV outcomes for women living with HIV/AIDS (WLWH) following release from correctional settings. Despite growing numbers of incarcerated WLWH globally, there remains a substantial gap in research examining the impact of incarceration on HIV health outcomes for WLWH. This review highlights the critical need for further studies examining the experiences of WLWH throughout incarceration trajectories, and the need to develop specific gender-informed interventions aimed at improving post release engagement in care for WLWH, alongside efforts to prevent the incarceration/re-incarceration of WLWH.

Dr Kate Dolan et al.\textsuperscript{16} presented an UNODC commissioned global survey on HIV in prisons

\textsuperscript{10} WHO. (2013). *Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection.*
http://apps.who.int/iris/bitstream/handle/10665/85321/9789241505727_eng.pdf?jsessionid=0FAF2987BC8D581BE95AA2E381C991B1?sequence=1

\textsuperscript{11} Ibid.

\textsuperscript{12} AVERT. *Harm reduction for HIV prevention.*
https://www.avert.org/professionals/hiv-programming/prevention/harm-reduction#footnote72_b00t67

\textsuperscript{13} WHO. (2017). *Focus on HIV in prisons vital to end AIDS.*
http://www.who.int/hiv/topics/prisons/en/

\textsuperscript{14} Trends in HIV and HCV seroprevalence among inmates entering the NYS department of corrections and community supervision system, 1988-2015. AIDS 2018.

\textsuperscript{15} A systematic review of HIV outcomes and engagement in care across incarceration trajectories among women living with HIV. AIDS 2018

\textsuperscript{16} Supporting regional compliance with HIV health and Human Rights minimum standards for prison populations of sub-Saharan Africa. AIDS 2018.
http://programme.aids2018.org/Programme/Session/1466
epidemiology and service coverage. Some key findings: 1. epi data is severely limited; 2. few data on incidence, PWIDs and MSM; 3. mortality and new cases and disaggregated by sex (except HIV), & TB major killer but few data; 4. mortality should be reduced; 5. Comprehensive Package – availability is low esp. condoms, OST, NSP, ART mostly available in Western and Central Europe and North America; 6. Coverage is very low: Condoms = 22 countries, OST = 6, ART=14, TB Rx =20.

Sandra Ka Hon Chu et al.\(^\text{17}\) asserted that 80% of federally incarcerated men in Canada were identified as having a substance use problem upon admission and one-quarter of federally incarcerated women are serving time for a drug offence. The presenters observed that injection drug use is a major factor contributing to HIV and HCV transmission behind bars in Canada. That said, prison-based needle and syringe programs (PNSPs) were as of yet not implemented (note\(^\text{18}\)). The authors concluded that it essential for correctional officers to be educated on drug use and drug dependence if PNSPs are to be effective. The challenges to PNSP implementation are considerable, but they are not insurmountable. Where PNSPs exist, there is a high level of staff support for the programs. With education about the manifold benefits of PNSPs, including for workplace health and safety, misconceptions about PNSPs can be addressed, concerns can be eased, and a seemingly intransigent workforce could emerge as PNSP champions.

Sabine Hermans and Robin Wood\(^\text{19}\) emphasized that prisons are an amplifier of tuberculosis. The growth of incarceration rates by 275% globally between 2000-2016 adds to the problem. Studies in Brazil demonstrate a 42% likelihood of infection within a single year in prison. Prison health authorities often do not follow WHO guidelines.

Peter Wiessner reported that establishing TB programs in prison reduces the TB burden in the general population. In many regions, prisons are the key driver of TB and MDR-TB that spill over to general population. Reasons are poor adherence, discontinuation of treatment upon release and lack of access for NGOs delivering services in prison. To tackle the situation, good screening practices were identified. However, prisons remain disconnected from the general health system, leading to double standards, disregard of guidelines and a lack of sufficiently-trained health personnel. Better cooperation between Ministries of Health, Justice and Interior are needed to change the situation. During this plenary session, the presenters showed compelling data to support the hypothesis that TB in prisons is a major public health issue, and a potentially important driver of TB in the community. Current strategies for

\(^{17}\) Harm reduction friend or foe? Correctional officers and prison-based needle and syringe programs. AIDS 2018

\(^{18}\) Beginning in June 2018, the Correctional Service Canada (CSC) started to implement a Prison Needle Exchange Program at one men’s and one women’s institution as the initial stage of

\(^{19}\) Prisons and tuberculosis: plenary session. AIDS 2018
screening, diagnosis, and prevention appear to be inadequate, and this new evidence should be used to inform updated screening recommendations. This session highlighted the importance of finding ways to address the TB epidemic in prisons, including advocating for this issue at the upcoming UN High Level Meeting on TB.

Rick Cook et al.\textsuperscript{20} presented the NYS Department of Health (DOH) and NYS Department of Corrections and Community Supervision (DOCCS) Corrections to Community Care model. This model offers a public health opportunity to proactively engage incarcerated individuals and provide education, facilitate HIV testing and disclosure of HIV status, and support continuous care for individuals living with HIV both during incarceration and following community reentry. The presenters argued that ‘through-care’ [MB] serves as a pathway to assist incarcerated individuals living with HIV as they prepare to transition into the community and support positive health outcomes and self-sufficiency. They gain the knowledge and skills necessary to effectively self-manage and navigate the full continuum of HIV care and support that is available in the correctional facility and, once released/discharged, in the community.

Dr. Win et al. from the Asian Harm Reduction Network (Myanmar) presented an example of civil society organizations supporting the prison system. Within six months, 1006 inmates and staff were vaccinated for HBV, 180 inmates received HIV testing and counseling, 140 PLHIV received HIV care, 233 inmates were screened for TB (with 6 referred for treatment) and 1137 received BHC.

The presenters asserted that Myanmar is committed\textsuperscript{21} to:

1. 90% of people who inject drugs and prisoners having access to HIV combination prevention services
2. Scaling up HIV combination prevention interventions for priority populations (a.o. people who inject drugs and prisoners)
3. Provider initiated testing and counselling ensured for prisoners
4. ART in prisons (satellite sites) for those newly diagnosed and those previously on ART, linking released prisoners to ART services in the community and integrating TB–HIV services for prisoners
5. At least 5 models implemented to improve ART enrolment and retention for each key and priority population (a.o. PWID and prisoners)
6. Develop policy and programme for test, treat and provision of care and treatment in prisons
7. Integrate HIV testing, care and treatment with TB services in prisons.

It was observed that there are resource constrains, such as limited full ART coverage, infection control measures which can be expanded and through-care and referral of inmates that has not been formalized yet. The presenters argued that there is the opportunity to further implementation of

\textsuperscript{20} Corrections to community care: An innovate partnership to ensure HIV linkage to care and viral suppression for incarcerated individuals in New York state prisons. AIDS 2018

\textsuperscript{21} Myanmar National Strategic Plan for HIV and AIDS. Myanmar 2016 - 2020
health standard operation procedures, training of staff and to increase and systemize voluntary HTC and screening on TB coverage.

Ehab Salah and Signe Rotberg of United Nations Office on Drugs and Crime, co-chaired a session\textsuperscript{22} which provided a global overview and experiences from the African continent. The over-representation of HIV Key Populations in prisons, the sharply and rapidly growing female prison population with sub-standard infrastructure and lack of funding and services tailored for them and the continued neglect of prison settings in national HIV strategies present a threat to the current efforts and progress made in curbing HIV transmission in the community. The presenters argued that limited programming has been undertaken to ensure that both staff and prisoners’ HIV prevention, care, treatment and support, and sexual & reproductive health (SRH) needs are addressed. Improved policies and strategies, compliant with UN Minimum Standards and norms, need to be in place; along with greater resources dedicated to support the development and implementation of health and rights based programming. During this session presentations were also provided on the status of compliance to the UN Standard Minimum Rules for the Treatment of Prisoners - The Nelson Mandela Rules.

The well attended workshop ‘Prison Health a Logic Choice: Key Implementation Factors’ organized by AHRN, AFEW, UNODC, Health through walls/ICPA, brought together a range of senior presenters from several geographies: Eastern Europe, Asia, Africa and the Caribbean. Recognizing that in many countries the issue of HIV-Aids in prison is very socially and politically sensitive and that the implementation of programs in prisons can stagnate or even fail for a variety of reasons (e.g. due to misunderstanding, miscommunications or overlook of sensitivities and resistances), the workshop explored the experience of municipal health services and NGOs with the introduction of HIV-Aids programs in prisons. The workshop exchanged, collected and combined these experiences, encouraging learning from the different experiences in implementing HIV/AIDS and TB infection control, treatment care and support and broader harm reduction programs in different correctional services. Building on this, it identified which important steps should be taken to be successful and which errors should and can be prevented. The results of this workshop will lead to the development of a step-by-step pragmatic roadmap which can serve as a guide for both prison authorities and civil society actors.

8. Self-testing

\textbf{Recommendation:} Consideration be urgently given to developing self-testing policies to reach the UNAIDS 90-90-90 targets and accelerate entry to HIV care and prevention.

An estimated 9.4 million people remained undiagnosed globally in 2017, many of whom belong to groups at high risk of contracting HIV, such as female sex workers, prisoners

\textsuperscript{22} Supporting regional compliance with HIV, health and human Rights minimum standards for prison populations of sub-Saharan Africa. AIDS 2018.
and men who have sex with men, as well as partners of people with HIV and young people in southern Africa.

To meet the UNAIDS target—that 90 percent of people living with HIV know their status by 2020—we must move beyond conventional testing and invest in strategies such as self-testing. The fourth edition of the Unitaid-WHO market and technology landscape for HIV self-testing, published in June 2018, shows an increasing number of countries introducing self-testing, and more self-testing products becoming available. Countries with HIV self-testing policies numbered 59 in 2018, up from six in 2015, and 28 countries were implementing self-testing in 2018, almost doubling from 2017. Self-test kits are showing special potential for reaching into groups where HIV risk is high, but HIV testing has been low. Self-testing can be done in private, requires no special training, and serves as an entry point to HIV care and prevention.

“The HIV self-testing market has continued to grow and is poised to expand further. HIV self-testing is an important strategy in reaching underserved populations, and this report shows our investments, and those of our partners, have catalyzed the progress in this direction.” - Unitaid Executive Director Lelio Marmora.

A highlight of this year’s report is the comprehensive HIV self-testing market forecast. The forecast projects that 16.4 million HIV self-tests will be procured globally in 2020, a significant increase from just one million self-tests in 2017. The report also estimates that public sector procurement will contribute 9.1 million self-tests in 2020. The forecast shows growth in both public and private sectors. Beyond 2019, these increases are expected to be largely driven by low-, middle- and upper-middle-income countries implementing and scaling up HIV self-testing.

The report also presents an overview of self-testing products, including eight that are eligible for donor procurement, and one that has been prequalified by the World Health Organization (WHO). At least six other products that are in development are described. This diverse range of products and suppliers is encouraging however prequalification of additional products by WHO is needed to support the expected market growth. WHO prequalification is an internationally recognised assurance of quality for medicines and other health products. Although the market outlook for self-testing is good, the report recommends six priority areas for action by all stakeholders, including raising awareness of self-testing, and increasing demand for it.

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B. The context: rights, funding and civil society partnerships supporting the response

1. Civil society under threat: How can HIV advocates resist the impact?

Recommendation: Recognise the combination focus and role of especially NGOs working with key affected populations in harm reduction, expanding access to testing and treatment, identification and protection of human rights and working to sensitise and mobilise local communities to understand and support this.

Civil society organisations (CSOs) providing HIV services and advocacy to key populations and people living with HIV are increasingly under attack from populist and repressive government regimes across the world, delegates to AIDS 2018 heard on Wednesday. Speakers from Hungary, Russia, Venezuela, Kenya and the Philippines outlined ways they were facing not just financial cutbacks but government interference in their attempts to tackle HIV and support men who have sex with men (MSM), people who use drugs, sex workers and other vulnerable populations. Their stories, while both alarming and concerning, also gave suggestions for how CSOs might manage such situations and maintain their presence.

Peter Sarosi of Rights Reporter Foundation, Hungary, spoke of the rapid reductions in civil liberties under the Orbán regime in Hungary. Both there and in Russia and Kenya, CSOs receiving external donor funding are required to register as ‘foreign agents’, which carries a social stigma and discourages others from collaborating with them. Currently nine Hungarian CSOs are challenging this at the European Court of Human Rights.

The Hungarian drugs strategy no longer supports harm reduction and the two main needle exchanges in Budapest have been forced to close, reducing injecting equipment access by 55%. Helping migrants and refugees is now criminalised, despite there not being particularly large numbers of migrants. In response, agencies affected have increased internal collaboration and social media engagement to get their case across. They had found human stories of people affected by the changes particularly effective in countering government propaganda.

Ivan Varentsov of the Eurasian Harm Reduction Association outlined the Russian experience in recent years. He noted that the Eastern Europe and Central Asia (EECA) region is the only one where the epidemic is still growing, and that UNAIDS figures show Russia accounts for 81% of all new infections there. Approximately 70% of these are amongst people who use drugs and treatment coverage is only 35%. There is no government support for any form of harm reduction. Russia’s foreign agent law was enacted in 2012 and requires listed organisations to label all publications as from foreign agents. Since 2016 ten non-governmental organisations (NGOs) working in HIV prevention listed as foreign agents,
mainly for advocating opioid substitution therapy which is against national policy. Like Hungary, they are challenging this at the European Court of Human Rights although Russia now threatens to withdraw from it.

Another difficulty he cited was the sense that registered NGOs were constantly under threat of being fined for minor infractions.

“The law is like a hammer hanging over you and you never know when it will fall on you,” he said.

Alberto Nieves of Acción Ciudadana Contra el SIDA described a rather different situation in Venezuela, where the country is facing a complex emergency of political and economic origin. It has gone from having the best HIV treatment programme in Latin America to having none, leaving people with HIV at risk of death. The executive branch of government has effectively taken over from the elected politicians; wages could not meet inflation, crime is high and the health system is in chaos. The National Guard have broken up demonstrations by people with chronic diseases. Many people with HIV have left the country, representing a humanitarian crisis in progress.

Jonas Bagas of APCASO described yet another crisis, in the Philippines since the advent of the Duterte government and a declaration of a war on drugs. Official figures show that 4251 people have been killed in official encounters with police while a further 16,355 killings associated with drugs are being investigated. The Chair of the Commission on Human Rights has been jailed and the Chief Justice dismissed, while attacks on journalists, priests and local government officials were common. The Philippines faces an exploding HIV epidemic with 79% of all cases reported since 2013; however, almost 80% of these are amongst MSM and only 4% amongst people using drugs. Nevertheless, government funding is directed at the “war on drugs” which has become a key plank of the President’s consolidation of power.

NGOs working with both people who use drugs and people living with HIV are responding by documenting human rights violations while trying to maintain harm reduction services. They have sympathetic lawyers working with the legal community to sensitise them to the issues. Saoyo Tabitha Griffith, a lawyer, described a situation in Kenya which had echoes of the stories from Eastern and Central Europe. Like those examples, Kenyan CSOs cannot operate unless they are registered and since 2014 some 510 have been deregistered with a further 957 threatened. The explanations given have cited terrorism, tax evasion or misappropriation of funds but this has included some of the key HIV and human rights groups. Some groups have fought their deregistration, she said, but “you end up spending more time fighting deregulation than doing the job you’re meant to do”. Organisations face raids, often linked to their work at sensitive times, such as an election monitoring group which was raided shortly after drawing attention to irregularities in the general election.

Others, particularly LGBT organisations, have been refused registration at all and have had to take to the courts to invoke the Constitution which allows freedom of association. The government has also tried unsuccessfully to take control of all external donor funding through a central agency which
they would control, and to further restrict foreign funding.

To defend Kenyan CSOs, international scrutiny had been helpful, particularly from the UN. Key actions to defend organisational existence were described as:

- Comply with tax and other regulations fully at all times
- Litigate to gain constitutional rights
- Use the media to highlight punitive or arbitrary actions
- Get donors to set aside an “emergency fund” for when organisations are deregistered and unable to continue services.

In closing, Shaun Mellors of International HIV/AIDS Alliance pointed out that the President of the United States, the proposed venue of the 2020 International AIDS Conference, is a friend and admirer of at least two of the rulers of the countries represented in the session, Putin and Duterte. He asked the conference organisers to consider what message that sent to community delegates.

2. Donor funding for HIV stalls, increasing pressure on high-burden countries to mobilise domestic resources

Recommendation: Engage with donors and governments to identify mechanisms to mobilise and channel domestic and external funding and technical assistance to prevention, human rights support and community sensitization and mobilization to support especially key affected populations and people affected by HIV. Support parliamentarians understanding and support for interdisciplinary policies and programs strengthening rights-based access to prevention and treatment.

Falling levels of donor government funding for HIV programs threaten progress towards the 2020 global target of 90-90-90, according to research presented on Wednesday at AIDS 2018. The 90-90-90 targets endorsed by governments in 2014 call for 90% of people to know their HIV status, 90% of people with diagnosed HIV infection to be on treatment, and 90% of people on treatment to be virally suppressed.

At a press conference, Jennifer Kates of the Kaiser Family Foundation presented data from their recent joint report with UNAIDS alongside three further studies showing that overall funding by donor governments has largely stalled, with 8 out of 14 governments reducing their global spend on HIV efforts in 2017. A rise in overall funding from 2016-17 was due to changed timings in US spending and not expected to be replicated in future. She concluded,

“’We are in a different age of financing. There is no significant new funding.’

A study from the Harvard TH Chan School of Public Health showed that of the $48 billion spent by 188 countries on HIV in 2015, overall about 62% came from domestic spending by governments and about 30% came from development assistance. However, in countries with high HIV prevalence nearly 80% of funding came from development assistance, making these countries vulnerable to any reductions in aid.
Deepak Mattur of UNAIDS presented a paper analysing data from 112 low- and middle-income countries which found that, overall, domestic public spending on HIV in these countries increased by 60% from 2006 to 2016. While almost all regions increased their domestic HIV resources, the lowest increase (33%) was in Eastern Europe and Central Asia. The study concluded that sustained increases in domestic public spending will be critical for ending AIDS as a global public health threat by 2030.

“We are already almost 20% short of the funding needed to reach the 2020 targets,” he said.

John Stover of Avenir Health, however, presented a paper contending that more focused allocation of resources could improve cost-effectiveness by about a quarter in the 55 low- and middle-income countries that account for about 90% of all new infections, making cost efficiencies that would allow newer interventions to be funded. The study found that cost-effectiveness varied widely across countries and interventions. The most cost-effective prevention interventions were generally male circumcision, prevention of vertical (mother-to-child) HIV transmission, outreach to sex workers and condom promotion, which need to be scaled up further. The most cost-effective programmes were in East and Southern Africa, where HIV incidence is higher and costs are generally low.

The audience also heard from Maureen Milanga of Health Gap and Baroness Barker of the UK’s All-Party Parliamentary Group on HIV. Maureen Milanga cited several examples of effective programmes which were unable to be provided at scale because of funding cuts, including the Dreams prevention programme for young women in Zimbabwe, which can only operate in 6 out of 59 districts. Baroness Barker gave a donor perspective. Agreeing that the world was not on track for its 2020 HIV targets, she said that the biggest challenge was to persuade people that AIDS was not over. However, she also suggested that funding must be re-orientated to meet the changing epidemic, with major donors looking to develop more sustainable plans instead of funding what they always had. With 70% of people with HIV living in middle-income countries by 2020, donor governments had a responsibility, she said, to remove barriers for key populations in these countries. She cited the UK Government’s recognition of its colonial past and recent allocation of £5 million and practical support to change anti-LGBT laws in Commonwealth countries.

3. Criminalisation of HIV high on agenda

Strategies to oppose the unscientific criminalisation of HIV transmission received a high profile at events held in Amsterdam this week to coincide with the 22nd International AIDS Conference (AIDS 2018). These included the launch by the Global Commission on HIV and the Law of a Supplement to its 2012 report, Risks, Rights & Health. The first edition of Risks, Rights & Health called on governments to outlaw discrimination, repeal punitive laws, and enact protective legislation to promote public health and human rights. The 2018 Supplement emphasises that the original recommendations remain relevant, but offers additional recommendations, taking into account developments in science,
technology, law, geopolitics and funding since 2012.

**The new recommendations include:**

- In countries where HIV criminalisation laws still exist, courts must require proof, to the applicable criminal law standard, of intent to transmit HIV.
- Governments must ensure that where an HIV-specific law has been repealed, there is a restriction on the application of any general laws to the same effect either for HIV or tuberculosis.
- Governments must prohibit the prosecution under HIV-specific statutes, drug laws, or child abuse and neglect laws, of women living with HIV for choices they make during and after pregnancy, including about breastfeeding children.
- Whenever HIV arises in the context of a criminal case, police, lawyers, judges and where applicable, juries, must be informed by the best available scientific evidence concerning the benefits and consequences of appropriate therapy.

Also this week, the Beyond Blame: Challenging HIV Criminalisation symposium, organised by HIV Justice Worldwide, brought together activists, advocates, lawyers, scientists, healthcare professionals, and policymakers from across the world to identify ways in which punitive laws and their enforcement might best be challenged. The symposium included a comprehensive review of the current state of criminalisation in regions across the world, personal testimonies of encounters with criminalisation and discussion of the benefits and pitfalls of using advances in prevention and treatment in advocacy work. Videos of the plenary sessions are available on the HIV Justice Worldwide YouTube channel.

**4. Consensus statement on HIV science in the context of criminal law**

To coincide with the AIDS 2018 conference, 20 of the world’s leading HIV scientists published the *Expert consensus statement on the science of HIV in the context of criminal law*[^2]. The statement is based on robust evidence and counsels caution when prosecuting people for HIV transmission, exposure and non-disclosure. It encourages governments, law enforcement officers, and those working in the judicial system to note carefully advances in HIV science in order to ensure that current knowledge in this field informs the application of the law.

The statement is explicit in its purpose is to assist those providing expert opinion evidence in individual criminal cases, and that it is “not intended as a public health document to inform HIV prevention, treatment and care messaging or programming”. The statement covers the factors influencing transmission risk and the risk associated with particular acts, the importance of proving transmission, and the harmfulness of HIV, noting that,

“[…] persistent misconceptions exaggerating the harms of HIV context of criminal law.”

infection appear to influence application of the criminal law.”

The statement is notable not only for its engagement with the most recent research findings, but also for its intended global reach, and in its uncompromising recognition of the impact which the refusal to deploy, or to misuse, science can have. It is a milestone in the history of HIV criminalisation, and in the campaign to ensure that people living with HIV are treated fairly in the criminal justice system.

5. Catalyzing Thailand and regional initiatives: building bridges towards global compact to end HIV-related stigma and discrimination in healthcare settings

**Recommendation:** To collaborate with specialists in designing context-specific training, immersion and community attachment to promote understanding, empathy and compassion by healthcare workers and reduce stigma and discrimination.

HIV-related stigma and discrimination remain critical barriers to achieve the 90-90-90 prevention and treatment targets and optimal health outcomes for people living with HIV and key populations. Thailand is a regional pioneer in the development and implementation of innovative system-wide stigma and discrimination responses in health settings. The symposium is an opportunity to learn from Thailand’s model on its adaptation of the global guidelines and measurement tools to national initiative; putting in place stigma and discrimination monitoring systems, using evidence informed actions at health facilities with community engagement in design and implementation at all levels. Inter-country sharing and linkages with Vietnam was highlighted.

Both countries explained how their training and ‘immersion’ of community attachment programs to reduce stigma and discrimination by healthcare professions included community attachment for these professionals and matching doctors and nurses with administrative and support staff during training – including with cleaners, drivers and others. This was done to increase understanding, empathy and compassion on the part of healthcare workers at all levels as well as to reduce stigma and discrimination.

The last part of the session aimed to build bridges to global action to attain “ZERO Discrimination in healthcare setting and beyond”. That will enable fast track efforts to reach ZERO new infections and ZERO AIDS-Related Deaths and put the world on track to ending AIDS.

6. Parliamentarians leading the fights against AIDS

**Recommendation:** Development partners and technical organisations should provide assistance to the Union Parliament Health & Sports Committee to understand the health status of people in Myanmar and to develop policy and program briefs on ways to strengthen the health status of people in Myanmar.

Donor funding for HIV/AIDS has been declining steadily in recent years and, in 2016, it reached its lowest level since 2010. Governments are less and less inclined to be
leaders in the fight against HIV as a result of competing priorities, decreased budgets and HIV/AIDS fatigue. In many donor countries, Members of Parliament are the driving force behind governments’ current leadership in HIV/AIDS. They defend the AIDS budgets and advocate for evidence-based policies. Champions in parliament are often part of networks, such as the Dutch Multi Party Initiative on SRHR & HIV/AIDS and/or the UK All-Party Parliamentary Group. In the United States, there is strong bipartisan support by PEPFAR and the Global Fund. These countries are considered to be top donors in the response to HIV, but face common challenges including competing priorities. Future contributions to the response are at stake.

This symposium session brings together Parliamentarian leadership from the US, UK, the Netherlands, Zimbabwe and Japan. They discussed current challenges and the relevance of parliamentary leadership in driving investments in the AIDS-response.
C. Treatment and clinical issues

1. PrEP use linked to fewer new HIV infections in US states

**Recommendation:** Support early initiation and expanded access to PrEP and ART as part of combination prevention, especially with key affected populations and their sexual partners.

As pre-exposure prophylaxis (PrEP) use continues to grow, epidemiological evidence is starting to show an association between increases in PrEP uptake and declines in new infections. A new analysis presented this week at AIDS 2018 shows a correlation between higher PrEP use and lower HIV incidence in US states. The US Food and Drug Administration (FDA) approved Truvada (tenofovir/emtricitabine) for HIV prevention in July 2012. PrEP use has risen steadily since then, especially among white gay and bisexual men in major cities, but it has been difficult to determine the total number or demographic characteristics of PrEP users because these data are not centrally collected. For the past several years Gilead Sciences, the maker of Truvada, has been reporting PrEP use estimates based on surveys of commercial pharmacies. At the 2017 International AIDS Society Conference on HIV Science, Gilead researchers reported that an estimated 120,000 people had ever started Truvada for PrEP from its debut in 2012 through early 2017. Gilead then teamed up with researchers at Emory University’s Rollins School of Public Health, who reported at this year’s Conference on Retroviruses and Opportunistic Infections that just over 77,000 people were taking PrEP in 2016 alone.

But PrEP is still only reaching a small proportion of those who might benefit. The US Centers for Disease Control and Prevention (CDC) estimates that less than 10% of the 1.2 million people at substantial risk for HIV infection are using PrEP. So is this increase in PrEP use leading to a decrease in new HIV infections? Trends in new infections suggest this may be the case. In San Francisco, where the city’s large gay community adopted PrEP early on, new infections fell to their lowest-ever level in 2016. However, the city’s early adoption of universal antiretroviral therapy immediately after HIV diagnosis makes it difficult to determine the effects of PrEP versus ‘treatment as prevention’. Likewise, a dramatic recent decline in new infections among gay men attending sexual health clinics in London – representing a very high-risk population – and a large decrease among men who have sex with men in Sydney have also been attributed to a combination of approaches including stepped up testing, treatment and PrEP.

In the latest analysis, reported as a late-breaking poster, Patrick Sullivan from Emory University and colleagues from Gilead and the CDC looked at correlations between PrEP use and HIV diagnosis rates, using data from people aged 13 and older in all 50 US states and Washington, DC, between 2012 and 2016. PrEP usage data came from pharmacies and diagnosis data from the National HIV Surveillance System. The researchers divided the states into quintiles, or fifths, according to the proportion of people
with a potential indication for PrEP who were receiving it. In the top quintile 11.0% of eligible individuals were on PrEP in 2016, compared with 3.5% in the lowest fifth. They noted that these figures represent a minimum level of PrEP use, as some people obtain PrEP from sources other than surveyed pharmacies.

The overall HIV diagnosis rate decreased significantly, from 15.7 per 100,000 persons in 2012 to 14.5 per 100,000 persons in 2016, an estimated annual decline of -1.6% per year. During the same period, PrEP use increased from 7.0 per 1000 eligible people to 68.5 per 1000 eligible people, an estimated annual increase of +78%. However, the researchers reported that some notable differences were seen in relation to PrEP use. New HIV diagnoses declined by -4.7% in the quintile of states with the highest PrEP use and by -0.94% in the medium-high group in an unadjusted analysis. In contrast, diagnoses increased in the quintile with the lowest PrEP use (+0.9%) and medium-low use (+1.53%). In an attempt to tease out the effect of PrEP versus treatment as prevention, the researchers also looked at viral load data from 37 states and DC. In this sub-analysis, the rate of PrEP use remained significantly associated with declines in new HIV diagnoses after controlling for state levels of viral suppression.

PrEP uptake was significantly associated with declines in HIV diagnoses in the USA, and this association is independent of levels of viral suppression, the researchers concluded. They recommended that US states should take steps to increase the use of PrEP among persons with indications and should continue efforts to increase HIV viral suppression for people living with HIV.

“By documenting significant declines in average new cases of HIV in states where Truvada for PrEP has been most widely adopted, our analysis emphasizes the importance of improving access to HIV screening and a full range of prevention tools, including PrEP, in US states,” Sullivan added.25

2. Supervised drug consumption sites offer opportunities for HCV testing and treatment

Recommendation: Expand the reach of comprehensive harm reduction services including access to HCV testing and treatment to reach majority of people who inject drugs.

Safe injection sites could help control HIV and hepatitis epidemics among people who use drugs. Most supervised drug consumption facilities offer hepatitis C virus (HCV) testing and referrals, but very few offer treatment.

indicating that they could potentially play a greater role in curbing transmission and negative health outcomes related to hepatitis C, according to research presented this week at AIDS 2018.

HCV, hepatitis B virus (HBV) and HIV are rapidly spread through shared drug injection equipment, and people who use drugs have high rates of these infections. Drug overdose is also a growing concern, worsened by the introduction of fentanyl and other opioids that are much stronger than heroin. The advent of highly effective and well-tolerated direct-acting antivirals offers the opportunity to expand hepatitis C treatment beyond liver disease specialists. Mathematical models—and early real-world evidence—suggest that providing treatment for enough people could eliminate hepatitis C as a public health threat. As one of the highest-risk groups, people who inject drugs are key to this effort.

Drug consumption rooms, known in some countries as supervised injection facilities, allow people to use drugs under the watch of trained staff, who can administer naloxone (Narcan) if needed to reverse opioid overdoses. They provide sterile syringes and other equipment, preventing transmission of HIV, HBV and HCV. They reduce street-based drug use and improper syringe disposal, as well as offering clients an entry point for seeking addiction treatment and medical care. Supervised consumption sites tend to serve the most vulnerable people who inject drugs, including those facing mental health issues and homelessness. Research has shown that they reduce risk behaviour and harms associated with drug use including overdose and infectious disease transmission\(^\text{26}\).

There are currently around 100 drug consumption rooms around the world, most of them in Europe. Amsterdam was among the cities that pioneered the concept in the 1980s. Australia has a supervised injecting centre in Sydney and is trying to open another in Melbourne. Vancouver’s ‘Insite’, the first North American facility, served more than 7300 clients in 2017. Several cities are currently vying to open the first supervised consumption site in the United States, including San Francisco, New York, Philadelphia and Seattle. Despite the large number of people who inject drugs in London and elsewhere, the UK currently has no drug consumption rooms.

Eberhard Schatz of De Regenboog Groep in Amsterdam presented findings from a study looking at what kinds of hepatitis C testing, treatment and other health and support services are provided by drug consumption facilities. This information was gathered using an online survey. The study, conducted in 2016, included 49 supervised consumption sites. A majority were in the Netherlands (20 operating sites, of which 8 participated in the study), Germany (26 operating and 17 participating site), Switzerland (18 operating and 7 participating sites), Spain (15 operating and 9 participating sites). Two of the six sites in Denmark, both sites in France, and the sole site at the time in Australia, Canada, Luxembourg and Norway also participated. (Canada has since opened more sites.)

\(^{26}\) Supervised injection sites gain ground in U.S. — evidence they can reduce overdose deaths and HIV and viral hepatitis transmission. (2018). 

https://www.medpagetoday.com/reading-room/aga/lower-gi/72161
Among the participating sites, 67% were run by non-profit organisations, 40% by governments, 7% by private parties and one by a church. Funding mostly came from local or municipal sources (71%), followed by state or regional sources (36%) and national governments (13%). A majority of consumption rooms (57%) were co-located with other services used by people who inject drugs, 30% were stand-alone facilities and 20% were mobile operations. The average number of visits per day was 80 and on average the sites had 12 stations or booths for drug consumption. A majority of clients used them to inject drugs, but some also smoked, inhaled or snorted drugs. The consumption rooms had an average of seven paid and one unpaid or volunteer staff on site during a typical day. Eighty per cent employed nurses, 78% included social workers, 44% had onsite medical doctors, 28% had health educators and 22% included paid peer counsellors.

Almost all the consumption sites offered syringe distribution, condoms and referrals for health services, drug addiction treatment or other care. A quarter offered onsite opioid substitution therapy (OST, usually methadone or buprenorphine), while 70% referred clients elsewhere for OST. Most (89%) provided onsite overdose management, though 26% did outside referrals for this; 37% provided naloxone to take away. Two-thirds of the sites offered onsite HCV testing and pre- and post-test counselling. Most provided brochures, counselling or other hepatitis education resources. An estimated 80% of clients received testing and 60% were found to be HCV-positive (median across sites). Just over half (54%) offered HIV testing.

A quarter of the sites offered liver health monitoring such as fibrosis blood tests or FibroScan, and an additional 11% planned to do so. However, just two sites (4%) provided hepatitis C treatment onsite and only one other planned to do so. Ten programmes either currently offered or planned to offer treatment offsite. Sites that employed nurse or doctors and those that offered OST were more likely to provide onsite hepatitis C medical management.

Looking at other services, half of the sites offered support for health self-management (around healthy diet, obesity, etc.) and 44% offered mental health care. Most sites offered coffee or a tea and a place for clients to charge their phones, while 78% provided personal care facilities such as showers and laundry. Asked how they would increase capacity given additional funding for HCV-related services, just over half said they would hire more staff, 46% would offer more staff training, 41% would fund educational materials, 26% would employ peer support workers and 24% would develop referral pathways. One programme indicated they would buy a FibroScan machine. Drug consumption rooms or supervised injection facilities “provide a broad range of social and health services in safe environment for people who inject drugs,” and some already offer HCV-related services, the researchers concluded. They added,

“additional financial resources for qualified staff and capacity building are essential to enhance the capacity for HCV services... [These facilities] should be considered as a low-threshold HCV treatment provider for people who inject drugs
on the community level; innovative arrangements should be sought.”

3. The kick that didn’t kill – first ever randomized HIV cure study fails to eliminate infected cells

One study whose results were eagerly awaited at AIDS 2018 was the RIVER study. This was the first study to add to standard HIV therapy a vaccine-plus-drug regimen intended to reduce the number of dormant immune-system cells that harbour HIV. A therapy that could produce significant enough reductions in this so-called ‘reservoir’ could produce a remission or cure of HIV infection. In short, RIVER did not produce the result hoped for: it did not reduce the amount of cells in the body containing HIV genes. It did stimulate an anti-HIV response, and it did cause some of the cells containing HIV to become active and therefore in theory ‘visible’ to the immune system, but those two effects did not link up to kill off HIV-infected cells.

RIVER is a study run by CHERUB, a HIV cure research collaboration run by the UK National Institute of Health Research at its centres in Oxford, Cambridge and London. The HIV DNA (genes) in the so-called reservoir cells are what makes infection incurable; because they are stored life-long, HIV disease re-starts as soon as HIV therapy is stopped, which blocks their activity. Principal investigator Sarah Fidler told the conference that SPARTAC, a study conducted from 2004-2010, was one of the first to look at whether starting HIV therapy soon after infection might enable early-treated people to stop antiretroviral therapy (ART) later. It found that while it only took four weeks on average for people with average to high levels of HIV DNA integrated into their cells to develop a detectable HIV viral load when taken off therapy, it took 12 weeks in people with low levels of DNA. Ten per cent of people in SPARTAC with low DNA maintained undetectable viral loads off treatment for over a year. There was therefore good reason to investigate ways of reducing the amount of HIV DNA in the body still further.

One of the strategies researchers have been considering as a pathway towards a complete cure has been the so-called ‘kick and kill’ strategy. The hypothesis behind this is that it’s the invisibility of the reservoir cells that is the problem; if they were active and became visible to the immune system, it would start to pick them off, and the reservoir of HIV DNA would start to shrink. The hope is that once the reservoir shrinks sufficiently, people might be able to stop ART for a long time or even permanently without HIV reappearing.

The River Study: RIVER recruited people who were diagnosed and started ART within the first few weeks of HIV infection, and who were therefore likely to have a smaller number of cells containing HIV DNA. Sixty people, all male, and gay men apart from five, were recruited, with an average age of 32. They all had recent infection and early treatment, with an average length of time of 28 weeks between HIV infection and entering RIVER. They had an estimated maximum length interval of 16 weeks between HIV infection and diagnosis, so a minimum time on ART of 12 weeks before entering the study. Their average CD4 count was 708 cells/mm³ and all but one had a viral load below 50 copies/ml at randomisation.
They were randomised to continue on ART alone or take ART plus the ‘kick’ and ‘kill’ therapies. As these consisted of a vaccine followed by the gene stimulating drug vorinostat, this was called the ARTVV arm. RIVER gave the ‘kill’ part of ARTVV first: it administered a vaccine designed to amplify and broaden the immune system’s natural reaction to HIV. This makes sense, as you need a vigilant immune response already in place to recognise the woken-up virus. It gave people two vaccine shots, one at randomisation and one eight weeks later. The vaccine was a so-called vector vaccine: it consisted of parts of the HIV genetic code that are particularly ‘conserved’, i.e. which are essential to the virus, vary little from type to type and do not change over time, wrapped up in the shells of two different viruses, an adenovirus at week zero and a vaccinia virus at week eight.

The ‘kick’ part of the study was then given: the drug vorinostat (Zolinza) was administered as one dose every three days for the next 30 days after week eight. Vorinostat is an HDAC (histone deacetylase) inhibitor, meaning that it loosens DNA strands inside cells and enables inactive genes, including ones that activate immune-system cells, to switch back on, so the cells become active again. The theory was that the newly active infected cells would start assembling the cellular machinery to make more HIV, and that this would get noticed by the immune system that had been primed by the vaccine. The cells would be killed, and the reservoir of HIV DNA purged. There should be little danger of active HIV therapy developing though, as all RIVER patients remained on ART. There were more adverse events (AEs) in people given the ARTVV regimen, but the excess was entirely due to AEs classed as mild; in fact there were more severe adverse events (six versus one) in the ART-only arm. The primary outcome was that there was no decrease in HIV DNA in people given the ARTVV regimen. There was a decrease in DNA between diagnosis and starting RIVER, due to patients being put on ART, but absolutely no change thereafter, and no difference between people on ART alone and people on ARTVV. There was also no difference in the amount of new HIV viruses produced by people’s cells in the lab dish.

The ARTVV regimen did have some effects. It boosted the number of HIV-specific CD4 cells nearly tenfold, and CD8 cells to a lesser degree. The CD8 cells of patients given ARTVV was preserved at pre-ART levels, meaning that the vaccine did create what could be a useful immune response in other circumstances. The vorinostat also produced a measurable increase in HIV gene expression, though tests are ongoing to find out what the effects of this were. However, the lesson from RIVER is that the effects of the two therapies did not combine to produce a decline in cells containing HIV DNA.

**Comments and conclusions:**

“The study has shown,” said Sarah Fidler, “that this particular set of

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treatments together didn’t add up to a potential cure for HIV.”

In a press release, co-principal investigator John Frater said: “We need to think about why we didn’t see an effect. It is possible that vorinostat was not quite potent enough to wake up as much HIV as was needed, or that a different sort of immune response to the one we induced is needed to target the HIV reservoir.” Sarah Fidler, at the conference, contrasted the results with an unrandomised study presented in 2017, BCN002, which gave subjects two therapeutic vaccines plus a different genetic stimulant, romidepsin. In this study, 38% of participants were able to maintain undetectable or low viral loads for months after being taken off ART. However, because this was unrandomised it is not clear whether this was due to the treatment regimen, or simply because they received ART soon after HIV infection. There are no plans to take participants in RIVER off ART.

Fidler paid tribute to the participants in the study. There was 100% retention, with no participants lost from the study. “They take time off work, they come for lots of visits and tests, and they are an amazingly committed group of people,” she said. Damian Kelly, RIVER’s community advisory board leader, said:

“RIVER had outstanding commitment from participants because people want to see an HIV cure happen. These results will help to direct and inform the design of future trials and move us closer towards the goal of a cure.”

4. Zero transmissions mean zero risk – for gay men as well as heterosexuals

The likelihood of anyone living with HIV who has an undetectable viral load passing the virus on to a sexual partner is scientifically equivalent to zero, researchers confirmed at AIDS 2018. Results originally announced in 2014 from the first phase, PARTNER 1, already indicated that ‘Undetectable = Untransmittable’ (U=U)28. However, the statistical certainty of this result was not quite as convincing in the case of gay men, or for anal sex, as it was for vaginal sex.

Results from PARTNER 2, the second phase, which only recruited gay couples, were presented also presented. The results indicate, in the words of the researchers, “A precise rate of within-couple transmission of zero” for gay men as well as for heterosexuals. The PARTNER study recruited HIV serodiscordant couples (one partner living with HIV, one partner HIV negative) in 14 European countries. The study found no transmissions between gay couples where the partner living with HIV had a eurp under 200 copies/ml – even though there were

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nearly 77,000 acts of condomless sex between them.

PARTNER 2 tells us that U=U holds just as strongly for gay men (and for anal sex) as for heterosexuals.

5. Dolutegravir-based ART recommended for all – if reliable contraception is available

The World Health Organization (WHO) has issued new antiretroviral treatment guidelines recommending dolutegravir-based treatment as the preferred option for all adults, adolescents and children, including women and adolescent girls who have access to consistent and reliable contraception. Speakers at AIDS 2018 said the decision highlights the huge gap in access to reliable contraception and its lack of integration into HIV programmes, especially in sub-Saharan Africa, where access to sexual and reproductive health services is emerging as a major challenge facing HIV treatment programmes.

The guidelines were released on the opening day of the conference, where women living with HIV from sub-Saharan Africa demonstrated to demand that they, not ministries of health, should decide whether they receive dolutegravir. The protest came in response to recent decisions in some countries to withhold dolutegravir from women of childbearing potential due to safety concerns over the use of the drug in the early stages of pregnancy.

Ministries of Health and women living with HIV need to balance the risk of neural tube defects—which are reduced by folic acid supplementation—if dolutegravir is used against the greater risk of unsuppressed viral load, side-effects or adverse birth outcomes other than neural tube defects if efavirenz or another antiretroviral drug is used in place of dolutegravir, speakers agreed. Countries also need to consider the balance of risk and benefits at a population level, said Meg Doherty of WHO. These include fertility levels, contraceptive availability and coverage, levels of antiretroviral drug resistance and drug availability.

6. On-demand dosing as effective as daily dosing in first year of French PrEP study

There have been no new HIV infections in a demonstration study of PrEP (pre-exposure prophylaxis) in France. Over half of participants chose to use on-demand dosing for PrEP, with the rest opting for daily dosing, but both options have been equally effective, Jean-Michel Molina of the University of Paris Diderot told a press conference in Amsterdam in July.

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The ‘Prévenir’ (prevent) study is gathering data on the best ways to deliver PrEP in Île-de-France, which is the region of Paris and its suburbs. The researchers hope to show that having an extra 3000 people take PrEP will result in a marked fall in HIV diagnoses among men who have sex with men in the region. Molina presented data on the first year (from May 2017) of the three-year study. A total of 1628 people have enrolled, almost all of whom (98.8%) are men who have sex with men. Twelve heterosexual men and women as well as eight transgender people have enrolled.

Participants can choose whether to follow the on-demand dosing schedule (sometimes referred to as ‘event-driven’ or ‘event-based’ dosing) that was validated in the IPERGAY study32, or to use daily dosing, which is more commonly used in other parts of the world. On-demand dosing involves taking a double dose of PrEP (two pills) from 2-24 hours before anticipated sex, and then, if sex happens, additional pills 24 hours and 48 hours after the double dose. There have been zero infections in both groups. The researchers estimate that, so far, 85 HIV infections have been avoided in this cohort of 1628 people.

7. Rapid start to HIV treatment linked to falls in diagnoses

More rapid initiation of HIV treatment after diagnosis – and the shortening of the period with detectable viral load – has coincided with declines in new HIV diagnoses in San Francisco and Melbourne, research groups reported at the conference.

In theory, reducing the period during which people have a detectable viral load should reduce the period during which people can pass on HIV to partners and so reduce the number of new HIV diagnoses. In San Francisco and Melbourne, rapid treatment initiation is now the norm. In Melbourne, 292 gay and bisexual men were diagnosed with HIV between 2012 and 2017 and the percentage with undetectable viral loads within 12 months of diagnosis increased from 59% to 97%.

New HIV diagnoses began to decline sharply after 2014, corresponding with a decline in the interval between diagnosis and undetectable viral load from 98 days to 49 days between 2014 and 2016. HIV incidence declined from 0.86% in 2014 to 0.38% in 2016 and 0.27% in 2017. The San Francisco City Department of Public Health looked at people diagnosed since 2008 and how much time they spent with a viral load above 1500 copies/ml in the year after diagnosis (the level above which HIV transmission is thought to become more likely).

A total of 2256 people were diagnosed with HIV between 2008 and 2016. In 2008, people diagnosed with HIV spent 46% of the first year after diagnosis with a viral load above 10,000 copies/ml and 62.3% with a viral load above 1500 copies/ml. In 2010, a policy of offering treatment immediately after

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diagnosis was introduced. By 2016, people diagnosed spent only 17% of the first year after diagnosis with a viral load above 10,000 copies/ml and 24.8% with a viral load above 1500 copies/ml.

8. Test and treat studies show high rates of HIV diagnosis and viral suppression

Two large studies of community-based universal test and treat campaigns to promote HIV diagnosis, treatment and prevention show that the campaigns achieved very high rates of HIV diagnosis and viral suppression, as well as reductions in HIV incidence on some measures. Large-scale community campaigns that go beyond the HIV clinic to offer testing and link people to HIV care have been piloted in several African countries, adopting methods such as door-to-door testing and community health events to reach people who might not attend health facilities or otherwise be offered an HIV test.

The SEARCH study, carried out in Uganda and Kenya, offered HIV testing and rapid treatment initiation within a multi-disease campaign also designed to diagnose and treat high blood pressure, diabetes and tuberculosis (TB) in the whole community. Overall, the study found that by the end of year three, 79% of people with HIV in the intervention communities had a fully suppressed viral load compared to 68% in the control communities. The effects of the multi-disease campaign went beyond viral suppression. People with HIV in the intervention communities were 20% less likely to die during the study than people with HIV in the control communities, and the mortality rate was 11% lower among all people enrolled in the intervention communities compared with the control communities. Results across the targeted health conditions were good, including TB incidence being almost 60% lower in the intervention communities. The Ya Tse study, carried out in Botswana, evaluated the impact of an intensive community testing campaign, immediate treatment initiation and scaled-up provision of male circumcision. In the intervention arm, 57 people acquired HIV infection compared to 90 in the standard-of-care arm, representing a 30% reduction in incidence. The study also found a high rate of viral suppression among people diagnosed with HIV at baseline. The proportion of people who were virally suppressed increased by 18% in the intervention group and 7% in the control group. By the end of the study, 88% of all people diagnosed with HIV in the intervention group had an undetectable viral load.

9. Why are some countries slow to implement HIV treatment guidelines?

Differences in countries’ economic prosperity and HIV prevalence do not explain the speed with which they update their national treatment policies and guidelines, but factors related to a country’s political structure are relevant, the AIDS 2018 conference heard yesterday. Over the years, there have been a series of important changes in the expert opinion and scientific evidence on when people should begin antiretroviral therapy (ART). Since September 2015, the World Health Organization has recommended treatment for all people with HIV, regardless
of CD4 count. However, there is a great deal of diversity in national policies, with many countries lagging behind the guidelines.

A new study identified 290 published national ART guidelines from 122 countries, and interviewed 25 key people from 12 countries in order to shed light on barriers and facilitators of policy change. It found that several factors which could be expected to have an impact on uptake of new guidance had only a minor impact. These included HIV prevalence, gross domestic product (GDP), and how democratic a country was. However, it did find that the structure of government was important, with countries which have more centralised power structures being slower to implement changes. It seems that in countries with more complex bureaucratic and political structures, there are more opportunities for professional and community groups to exert influence.

Ethnic and linguistic diversity within a country also had a strong association with slower decision making. To influence change in such contexts, it may be helpful to have a variety of ‘messengers’ who can reach different ethnic, linguistic and social groups.

**10. High uptake of HIV self-tests by outpatients**

Most models of HIV self-test distribution are based on community settings but providing self-tests to outpatients at health facilities is a promising strategy, the conference heard. Patients at clinics offering self-testing in Malawi were seven times more likely to take a test than people offered provider-initiated testing and counselling (PITC). Fifteen healthcare facilities were randomised to provide HIV testing in one of three ways: I Standard PITC: patients referred to another part of the facility for an HIV test. I Optimised PITC: HIV testing in the outpatient department, before receiving the service the person was attending for. I Facility-based self-testing: HIV self-test kits distributed in the waiting area.

In a six-month period, 13,077 adults attended the outpatient facilities. Self-testing dramatically increased the proportion of outpatients tested – from 13% with standard PITC and 14% with optimised PITC, to 51% with self-testing. The benefit was most pronounced in young people aged 15 to 24. After adjusting for other factors that could influence the results, being at a self-testing site was associated with a sevenfold greater odd of testing for HIV. Providing self-tests within health facilities may have advantages in terms of being an approach that is feasible to scale up, which facilitates linkage to care, and in relation to quality assurance.
Annex A. Delegates and participants at AIDS 2018

<table>
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<tr>
<th>Serial</th>
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<td>1</td>
<td>Professor Dr Thet Khaing Win</td>
<td>MOHS</td>
<td>Permanent Secretary</td>
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<tr>
<td>2</td>
<td>Dr Khin Soe Soe Kyi</td>
<td>Parliament</td>
<td>Member of Health and Sport Development Committee, Pyithu Hluttaw</td>
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<tr>
<td>3</td>
<td>Dr Wai Phyo Aung</td>
<td>Parliament</td>
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<td>4</td>
<td>Police Col Than Lwin Maung</td>
<td>CCDAC, MOHA</td>
<td>Head of International Relations Department</td>
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<td>6</td>
<td>Professor Dr Htin Aung Saw</td>
<td>Professor and Head</td>
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<td>9</td>
<td>Dr Htun Nyunt Oo</td>
<td>NAP, MOHS</td>
<td>Program Manager, HIV</td>
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<td>10</td>
<td>Dr Nanda Myo Aung Wan</td>
<td>DDTRU, MOHS</td>
<td>Program Manager, Drug Dependency Treatment and Research Unit</td>
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<td>11</td>
<td>Dr Tint Naing</td>
<td>MOHS</td>
<td>Medical Superintendent, DDTH Myitkyina</td>
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<td>Dr Nilar Maung</td>
<td>MOHS</td>
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<td>Dr Nyein Chan</td>
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<td>15</td>
<td>Dr Min Shwe</td>
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<td>AD, Shan North</td>
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<td>21</td>
<td>Dr Myo Kyaw Lwin</td>
<td>UNAIDS</td>
<td>Senior Program Adviser</td>
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<td>Mr. Troels Vester</td>
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<td>Robert Bennoun</td>
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<td>29</td>
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<td>60</td>
<td>Mr Sai Aung Kham</td>
<td>National Drug User Network</td>
<td>Interim Chair</td>
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<td>61</td>
<td>Ms Khin Thidar Shwe</td>
<td>Phoenix</td>
<td>Peer Educator</td>
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Annex B: Lessons from implementation of drug policy in the Netherlands

Integrated, comprehensive drug responses, based on evidence, health and human rights

- Monitoring and research on substance use.
- Sharing knowledge, promoting public health education and implementation interventions.
- Supporting municipalities policies on substance use.

Drug Situation in the Netherlands

- Densely populated and urbanized country;
- Traditional country of trade and transportation;
- Open borders, gateway to Europe (Rotterdam- 16 mln containers);
- Individual freedom, divers society, multicultural society;
- Separation government /morality and religion;
- Culture of consultation and consensus.

Drug policy has to fit in characteristics of country.

Drug policy -1975

1. Traditional response: strong emphasis on repressive policies, prohibiting use/possession/trade,
2. But the response did not address the nature and extent of the health crisis
   - 1975 : shift in policy, more emphasis on public health
   - Separation of markets into soft and hard drugs
   - Key criteria; is the level of health risk ‘acceptable?’
   - Soft drugs are permitted for personal use
   - Hard drugs are illegal and also the focus of public health

Soft Drugs since 1975

- Consumption part is regulated
- Sold via ‘coffee shops’
- Max 5 grams/person
- Regulated
  - Minimum age
  - No advertising
  - No alcohol
  - No hard drugs
  - Only to residents
  - No major supplies
Result of policy reform 1975

- Large group of young people experimenting with drugs
- Relatively small group of drug users with serious (health/social) problems
- Separate worlds of soft and hard drug use

Modernised approach

- Results from 2 crises; the drug crisis in the 1970s and the HIV crisis in the 1980s
- Driver for modernisation the policies with more realism and pragmatism

Consequences for Dutch drug policy

- Vulnerable to the supply of drugs
- Drug-free society is not a realistic option in the Dutch context
- Need for a practical and flexible policy
- Balance between individual responsibility and protective role of government

Key principles of Dutch drug policy

- Fact-based: Importance of research, evaluation and monitoring
- Drug problem primarily a (public) health issue
- Health promotion and harm reduction key concepts in effective demand reduction efforts
- Pragmatic rather than principle-based – ‘do what works’

Key objective of Dutch drug policy

- Balanced, integrated and evidence-based approach
- Overall aim is to reduce:
  - Drug supply (fighting production, trafficking and dealing)
  - To fight drug-related serious crime (organised crime and money laundering)
  - Drug demand (information, prevention and treatment)
  - Drug-related harm (health protection and care)
  - Public nuisance related with production, trafficking and use of drugs

Drug supply reduction is in line with other (European) countries:

- Signed the UN Conventions
- Fight against production (XTC, large-scale cannabis)
- Law on precursors
- Measures against drug trafficking has high priority (at harbours and airport)
- Legislation in investigation and prosecution of drug trafficking and money laundering
– Emphasis on international collaboration

**Treatment and care; key principles**

– Accessibility and differentiation
– Comprehensive treatment offer
– Cooperation between addiction care sector, general health care sector and judicial authorities
– Effective and evidence-based care

**Results in 5 indicators**

1. Drug use in the population
2. Estimates of problem drug use
3. Treatment demand
4. Infectious diseases (HIV, hepatitis B and C)
5. Drug-related deaths
### Drug use in the general population (18+) (2016)

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<th>Last year use (%)</th>
<th>Last month use (%)</th>
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### Key Indicator 2: Number of problem (hard) drug users

- In Netherlands: mainly heroin and crack cocaine
- Low rate of injecting (<10%)
- Ageing population
Key Indicator 3: treatment demand - Individuals in addiction care by primary problem 2015 (N= 64,821)

- alcohol: 45%
- cannabis: 17%
- opiates: 14%
- cocaine: 11%
- GHB: 1%
- ecstasy: 0%
- amphetamines: 3%
- medicines: 1%
- gambling: 3%
- other: 4%
Key Indicator 4: Infectious Diseases

- Between 25% and 80% of ever injecting drug users is infected with HIV/HBC/HBV
- However: strong decrease in new cases in the past years (almost zero)

Infectious Diseases

- Estimated number of injecting drug users: 1500 (2012)
- HIV
  - 0.4% of all registered new HIV infections annually are related to injecting drug use
  - In 4% of all registered HIV infections up to 2010 injecting drug use was the most likely route of transmission
  - 700 of the 8,345 AIDS patients (registered up to 2010) are injecting drug users (8.4%)

Hepatitis C

- Data not collected systematically
Injecting drug users belong to the groups with the largest numbers infected with HCV

**HIV/ AIDS – monitoring**

PY = personenjaren. Bron: Amsterdamse Cohort Studies (Van den Broek et al., 2016).

**Summary facts and trends**

- Cannabis is the most prevalent illegal drug in the general population aged 15-64, followed by ecstasy and cocaine
- Use of stimulants (especially ecstasy) has increased and is (far) above the European average; predominant low frequent use, linked to nightlife settings
- Current cannabis use among Dutch students declined
- Heroin use continues to decline
- Low prevalence of GHB use (but relatively high risk of acute incidents and of relapse in addiction treatment)
- Use of new psychoactive substances (NPS) relatively low, except for 4-fluoroamphetamine (NB controlled substance since May 25, 2017)
- Indications for increased use of nitrous oxide and ketamine
- Decreased incidence infectious disease
- Increase in registered overdose mortality

**Drug prevention: integrated approach**
- Different life areas of young people: school, home and leisure time
- Different elements: knowledge, attitudes, social norms, life skills
- Different target groups: young people (10-25 y) and intermediaries (teachers, parents, club / pub staff)
- Different substances: legal and illegal substances
- Integrated in broad framework: health promotion, lifestyle, youth culture

**Drug demand reduction, an integrated approach: understanding demand reduction as comprehensive, integrative and stepped approach including:**

7. Preventing use
8. Preventing health incidents
9. Early detection and brief interventions to prevent addiction
10. Treatment of addiction and problem use
11. Harm reduction
12. Social rehabilitation and reintegration

**Examples: The Healthy School and Drugs**

To increase effectiveness shift of focus from information about drugs to:

- Setting norms
- Generic skills / life skills training / resilience /
- Impulse control
- Policy: Drug Free Schools
- Early detection and guidance
- Selective and indicated prevention

**Harm reduction for hard drug users**

- Decreasing demand: decrease of injecting drug use
- Needle exchange (Amsterdam 2013: 175,000 syringes supplied)
- Methadone treatment: 7.569 clients -2014-, average dose 80 mg 2014-
- Heroin assisted treatment in 2014: 740 slots in 18 settings in 16 cities
- Low-threshold facilities
  - day and night shelters
  - basis counselling and medical care
- Drug consumption rooms (in 2016: 48 DCR’s)
- Outreach work among difficult-to-reach groups

**Harm reduction principles in the NL**

- Pragmatic approach: relapse in heroin use is not “punished”
- First choice substitution: methadone
- If methadone doesn’t work: medical heroin (max: n=1000)
- Large NSP’s (but decreasing need)
- Drug & alcohol consumption rooms
- Sheltered living projects, living room projects, etc
- The combination of Harm Reduction measures is most effective!

**Harm Reduction, Lessons learned (I)**

- Collaborative effort: public health, law enforcement, government & NGOs
- Public health goals received priority
  - User communities received good access to targeted health and social programs.
  - Good coverage of services.
  - Targeted interventions
  - Ongoing innovation and improvements

**Health programs**

- Stabilization on methadone/heroine (OST)
- FULL RANGE of health interventions (OST, NSEPs, community outreach, drug consumption rooms, peer support, availability of materials, ...)
- Access to HIV and HCV treatment
- Continuation (of OST) in correctional services

**& social programmes**

- Housing programmes

= Can lead to significant individual and public health benefits and has significant impact on the wider environment

**Conclusion for Harm Reduction**

- Current PUD and PWID stabilised or matured out of problematic use
- Major success in prevention of HIV, HCV, HBV (and ODs, endocarditis, DVT, abscesses, blood poisoning etc)
- Harm Reduction approach has become one of pillars of European Union Drug Strategy and in many EU countries
- ‘Full harm reduction works’ to contain problematic drug use and reduce HIV and other BBVs) transmission

**Overall Conclusions**

- Netherlands’ drug use not significantly different compared to surrounding countries
- Relative effective:
  - Drug use stable
  - Low rate of mortality
• 70-80% problem drug users in contact with healthcare
• Harm Reduction is effective
• No arrests for possession of small quantities of cannabis (= no criminal records)

Rationale of drug policies

In general: to bring health and social well-being to the inhabitants of a country
• By reducing the availability of drugs and the consequences of drug use:
• By providing information, treatment and support for those who need it
• Based on scientific guidance and rational outcomes (‘Do what works’)

Conclusions, global

Stabilising markets of decreased risk and harm through regulation and reform

– Cannabis regulation
– Opioid substitution treatment
– Decriminalisation of personal possession
– Destabilised markets with increased risk and harm
– Increased injecting of Amphetamine Type Stimulant (eg SE Asia)
– Increases of synthetic opioids (eg North America)
– Increase in new unknown substances (NPS)

Concluding, Global

Global drug policies and in many countries (also in Central Asia) are at critical stage and in the process of review.

Global directions towards a more balanced approach:

– More health-centered, less imprisonment
– Explore alternative sanctions, regulations
– More attention for Harm Reduction