HepHIV 2019
28-30 JANUARY · BUCHAREST

CONFERENCE PROCEEDINGS

HEPHIV 2019 BUCHAREST CONFERENCE

CHALLENGES OF TIMELY AND INTEGRATED TESTING AND CARE

BUCHAREST, 28-30 JANUARY, 2019

PROCEEDINGS OF THE HEPHIV 2019 CONFERENCE

Challenges of Timely and Integrated Testing and Care

Bucharest, 28–30 January 2019

Misha Hoekstra, rapporteur

Contents

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Tatjana Reic	European Liver Patient´s Association, Belgium
Tom Platteau	Institute of Tropical Medicine, Brussels, Belgium
Victor Grecu	Victor Babes Clinical Hospital of Infectious Diseases and Pneumophtisiology, Craiova, Romania

OPENING SESSION: CHALLENGES OF TIMELY AND INTEGRATED TESTING AND CARE

Monday, 28 January 2019

Welcome: conference objectives and overview

Conference co-chair **Adrian Streinu-Cercel** (Carol Davila University of Medicine and Pharmacy) welcomed the 243 participants to Bucharest during the Romanian presidency of the EU. Fellow co-chair **Daniel Simões** (University of Porto) noted that attendees hailed from 37 countries, with 36% being community representatives, 21% policymakers or working in public health, 14% clinicians and 8% social scientists, epidemiologists or statisticians. The conference was intended to follow up on the call to action from the HepHIV 2017 conference in Malta. Specifically, it was designed to provide an overview of what had happened in the field of testing and care for viral hepatitis and HIV in the intervening two years; to encourage stakeholders to develop creative solutions to research and implementation challenges in the field; and to find ways to translate ambitious goals and targets into action. Simões said that we already have what we need to eliminate these diseases, and he exhorted his listeners to be single-minded in their efforts to do just that.

> We have the capacity, we have the tools, we have the brains. We *will* end this. Let's get to it.
>
> *—Daniel Simões, University of Porto*

Recent trends and testing initiatives in Romania

Sorina Pintea (Romanian Minister of Health) said that, following the success of its HIV programme in recent years, Romania was now turning its attention to viral hepatitis. It introduced universal hepatitis B vaccination of newborns in 1996, and now GPs can require their patients to be tested for hepatitis B and C. Chronic hepatitis B is treated with interferon and nucleotide/nucleoside analogues. For chronic hepatitis C, the pool of patients eligible for antiviral treatment has expanded to those with F0 and F1 liver fibrosis. The country's screening programmes for HBV, HCV and HIV have all been scaled up. The Ministry of Health is now exploring integrated testing for these three viruses and linking those who test positive to care.

European Commission policy of integration for infectious diseases

Vytenis Andriukaitis (European Commissioner for Health and Food Safety) observed that in the EU, half of the people living with HIV (PLHIV) are still diagnosed late, while the vast majority living with HBV or HCV do not know they are infected. The European Commission is committed to an integrated approach for these three diseases and tuberculosis (TB), especially given the cost-effectiveness of integration and the fact that the people who are most vulnerable to them are likely to have multiple infections. The EU Health Programme has invested €12 million in HIV, hepatitis and TB research that focuses on outreach to vulnerable groups to improve their access to testing and care – most notably through its support for the Joint Action on Integrating Prevention, Testing and Linkage to Care Strategies Across HIV, Viral Hepatitis, TB and STIs in Europe (INTEGRATE).

> This conference offers an important opportunity to share best practices, develop creative solutions, and build political momentum. So let's grab it with both hands!
>
> *—Vytenis Andriukaitis, European Commissioner for Health and Food Safety*

HIV and HCV trends in the EU

Andrew Amato-Gauci (European Centre for Disease Prevention and Control (ECDC)) said that although HIV incidence has declined in the EU/European Economic Area (EEA) during the past decade, achieving the 2020 target of a 75% reduction is highly unlikely. The underlying transmission risks are not going away, and incidence is actually rising in a third of these countries. In 2017, 38% of new infections were reported among men who have sex with men (MSM),

while 41% of new infections were reported among migrants, independent of transmission route. Reported cases present late 49% of the time, and the data indicate the need for more testing aimed at older heterosexuals. Data on hepatitis B and C are strongly correlated with local testing practices, due to the largely asymptomatic nature of the infections. While surveillance is still quite poor and non-standardised, there are signs that hepatitis C is declining in the EU/EEA, though not among MSM, and not quickly enough to reach the 2030 elimination goal.

> The global mortality from viral hepatitis has now overtaken that for the other three major infectious diseases – TB, HIV and malaria.
>
> *—Andrew Amato-Gauci, ECDC*

The WHO targets for the response to HIV and viral hepatitis in the European Region

Masoud Dara (WHO Regional Office for Europe (WHO Europe)) observed that while the number of new HIV diagnoses continues to rise in the Region due to increasing incidence in the eastern part, it is rising more slowly now; the 2020 target in the WHO European action plan is a 75% reduction. Not coincidentally, testing and treatment gaps are much larger in Eastern Europe, where only 27% of PLHIV have achieved viral suppression, vs. 75% in Western and Central Europe (target: 73%). For hepatitis, only 9% of people living with HBV and 20% of those with HCV know they're infected (2020 targets: 20% and 30%, respectively), while treatment rates have increased only minimally. Dara said that the regional goal of ending AIDS and eliminating viral hepatitis as a public health threat by 2030 will require better tailored interventions for key populations; sustainable financing; wiser investment in targeted prevention, testing and treatment; a public health approach involving integration, decentralisation and equitable access; and expanded partnership among governments, civil society and the private sector.

A community perspective: stigma as a continued barrier to hepatitis and HIV testing in Europe

Sini Pasanen (EU Civil Society Forum on HIV/AIDS, Tuberculosis and Viral Hepatitis) addressed the ways that stigma – both stigma associated with HIV and hepatitis and stigma associated with key populations – discourages people from accessing testing services. Stigma feeds fears: of social ostracisation, the loss of friends and family, imprisonment, and discrimination in workplace, school and healthcare settings. In some ways, discrimination can be easier to deal with than stigma; it's easier to identify, and in many places, there are mechanisms to combat it. To fight stigma, Pasanen urged advocacy work, awareness-raising campaigns, legal protections, engagement with key populations, rapid testing, peer testing, confidential and anonymous testing, accurate and non-judgmental information on sex and sexuality, and decriminalisation of drug use, sex work and HIV transmission and exposure. She also promoted the concept of a "well-being economy", in which the primary goal of public policy is the well-being of all.

> Stigma, shame, HIV and hepatitis – they are siblings.
>
> *—Sini Pasanen, Civil Society Forum*

The HIV in Europe initiative: past, present and future

Brian Gazzard (Chelsea and Westminster Hospital) declared that while he's given up almost all of his HIV activities, he is still passionately committed to the work of HIV in Europe. The initiative's chief achievements, he said, have been to keep HIV and other infectious diseases high on the EU agenda and to draw attention to the challenges in Eastern Europe and to the heterogeneity of these epidemics across Europe. The HIV and hepatitis C fields need more social scientists, he said, and HIV in Europe has helped give them a voice – for instance through the People Living with HIV Stigma Index, which has not only provided insight into stigma, but also led to the reconfiguration of services and greater resilience in their clients. HIV in Europe has helped improve testing in both healthcare and community settings, in part through a better approach to counselling. Scientifically, its biggest achievement has been its work on indicator conditions, which redefined who should be tested for HIV. Finally, Gazzard endorsed the initiative's expansion to embrace viral hepatitis, TB and sexually transmitted infections (STIs).

Frequent testing [of MSM] isn't something testing providers should stigmatise; it's the sign of a good sex life. If you only tested once a year, that would be pretty depressing, wouldn't it?

—Brian Gazzard, Chelsea and Westminster Hospital

PLENARY SESSION 1: EPIDEMIOLOGICAL AND TESTING POLICY OVERVIEW: WHERE ARE WE IN REACHING THE TARGETS?

Tuesday, 29 January 2019

HIV in Europe adopts a new name: EuroTEST

Nikos Dedes (European AIDS Treatment Group (EATG)) prefaced the session with an announcement about the HIV in Europe initiative, which has been arranging biennial conferences on testing and care since 2007, including HepHIV 2019. He said that the initiative's steering committee had changed its name to EuroTEST to reflect its expanded focus on integrated testing and care for HIV, viral hepatitis, TB and STIs.

Monitoring the response to hepatitis and HIV in the European Region: are we on track to reach the targets?

Teymur Noori (ECDC) said that to meet the global targets for HBV/HCV incidence and mortality, WHO Europe developed an action plan with service coverage targets. The European Region is doing well with prevention efforts such as HBV vaccination and blood safety but has a long way to go with injection safety in healthcare and needle distribution to people who inject drugs (PWID). The targets of diagnosing 90% of the infected and treating 80% of those eligible by 2030 are extremely ambitious. Though the data are too poor to know how well the Region is doing, ECDC just rolled out a hepatitis B and C monitoring system to address the problem. For HIV, overall coverage in the western part of the Region has met the "three 90s" targets, but coverage elsewhere falls short, particularly in getting diagnosed people on antiretroviral therapy (ART) in the eastern part of the Region, where just 46% are on treatment. The biggest unaddressed policy area is treating undocumented migrants, who can access ART in fewer than half the countries in the Region. With new infections on the rise, it is highly unlikely the Region will achieve its fast-track targets by 2020.

The last fast-track target for HIV – to eliminate stigma and discrimination by 2020 – will probably be the most difficult to achieve, even by 2030.

—Teymur Noori, ECDC

Improving the HIV response using the universal health coverage (UHC) approach: WHO guidance on testing strategies and linkage to care

Elena Vovc (WHO Europe) began by summarising WHO recommendations for increasing HIV diagnoses and reducing late diagnoses. Most countries in the European Region still have not implemented lay-provider testing services, self-testing, home testing or voluntary partner notification. A new mobile app, HTS Info, gives users fingertip access to all WHO guidance on HIV, including updates. Vovc explained that UHC is a people-centred approach, and that at the UN General Assembly in 2017, WHO launched a UHC call for action that has been gathering momentum. She outlined several ways that UHC efforts can be used to improve the HIV response – by scaling up simple, effective HIV interventions and including them in UHC packages; promoting innovation; investing in community-based services in order to reduce stigma and reach people who would otherwise not access services; targeting HIV services to key populations; decentralising services, particularly in the eastern part of the Region; and advocating for increased health budgets and including comprehensive HIV services in UHC packages.

PWID and prisoners: priority populations for viral hepatitis testing

Jane Mounteney (European Monitoring Centre for Drugs and Drug Addiction (EMCDDA)) noted the large overlap between prisoners and PWID, with HCV prevalence being significantly higher among PWID with a history of incarceration. Prisons are an ideal setting for testing, but drug treatment centres are equally important; at least in the EU/EEA, more than half of PWID are in contact with such centres. The EMCDDA has been preparing a HBV/HCV elimination barometer to help countries identify how well their elimination efforts are doing. In spring 2018, 9 of the 12 countries that lacked hepatitis C policies were actually restricting PWID access to hepatitis C services. The EMCDDA is piloting a more active approach for drug services that begins with a checklist to identify barriers to HCV testing and a compendium of different models of care to choose from. Broader challenges include an aging population of opioid injectors in deteriorating health; a rise in the injection of stimulants, which have high injection frequencies and have been linked to recent HIV outbreaks; and limited equivalence and continuity of care for released prisoners.

Affordability and cost-effectiveness of hepatitis and HIV testing

Yazdan Yazdanpanah (French National Institute of Health and Medical Research (Inserm)) looked at how cost-effectiveness and budget-impact analyses can help national policymakers and guideline developers select testing strategies. In France, screening half the general population and then treating everyone with chronic HCV would cut prevalence by 40%, compared to treating only those at fibrosis stage F2. The cost-effectiveness of this strategy was calculated to be €31 000 per quality-adjusted life year (QALY), while screening just risk groups and people aged 40–80 was €21 000/QALY. The cost-effectiveness of a universal test-and-treat strategy depends largely on treatment costs. Yazdanpanah said that budget analysis is also crucial, as high overall costs and limited health-system capacity make prioritisation necessary. Portugal has had success in using more intense HIV testing strategies for high-prevalence districts. Studies have also shown the cost-effectiveness of frequent testing for risk groups, as determined by the national epidemic profile.

> We like to say that treatment is cost-effective – but that doesn't mean it's affordable.
>
> —*Yazdan Yazdanpanah, Inserm*

Discussion

Ganna Dovbakh (Eurasian Harm Reduction Association (EHRA)) highlighted two essential requirements for testing and treating PWID effectively: the decriminalisation of drug use and possession, and broad access to harm reduction. **Margaret Hellard** (Burnet Institute) said that the overarching goal of the three 90s is actually to reduce HIV *incidence*; without strong prevention efforts, reaching the 90% targets won't reduce incidence, and three 95s might be more appropriate.

Teymur Noori (ECDC) explained that, though ECDC is charged with monitoring stigma and discrimination, the indicators keep changing and it has proved almost impossible, though a few individual countries have had success. **Elena Vovc** (WHO Europe) said that shifting HIV services to primary care is problematic, at least outside the EU, because the fear of stigma keeps people away from those settings. It appears that stigma training for primary care needs to be repeated to be effective. **Nikos Dedes** (EATG) countered that normalisation efforts (such as shifting services to primary care) usually do help combat stigma, as does lay testing.

Brian Gazzard (Chelsea and Westminster Hospital) said that if good prevention and harm-reduction systems are not in place, high reinfection rates could make HCV treatment pointless. He also suggested further simplifying the WHO testing algorithm for HIV: instead of three tests, a rapid test and a viral load might suffice. **Elena Vovc** noted that viral load testing is quite expensive, the results take a long time, and the current test doesn't cover HIV-1 and HIV-2.

PLENARY SESSION 2: COMBINATION PREVENTION

Pre-exposure prophylaxis (PrEP): effective community mobilisation

Will Nutland (PrEPster) described how the movement to provide access to PrEP builds on traditional HIV street activism, legal activism and community outreach, using buyers' clubs, websites and underground education. PrEP activism has almost entirely been driven by individual PrEP users, rather than HIV institutions and organisations. Other factors contributing to the new model include the global generics market, innovative supply chains and the rise of social media. Nutland called for engagement with pharmaceutical companies and decision-makers, and for organisations like WHO, UNAIDS and the International AIDS Society (IAS) to start making PrEP users central to the meetings and decision-making around PrEP. He also stressed the importance of bringing the voices of those who *aren't* accessing PrEP to the forefront of advocacy and mobilisation efforts, and supporting activists that can reach such people, including women, transgender people, black MSM and migrants.

> We need to be holding our institutions to account. Why have so many of our leading HIV organisations been slow to champion PrEP? Why has so much of the community mobilisation work been done outside the HIV sector?
>
> —*Will Nutland, PrEPster*

HCV prevention and testing in harm-reduction programmes

Jason Farrell (Correlation Network) said that access to opioid substitution therapy (OST) and needle exchange has been associated with an 80% reduction in HCV incidence, while treatment with direct-acting antivirals (DAAs) can cure 95% of the PWID treated. Evidence-based behavioural interventions are also needed to help prevent reinfection. Ideally, harm-reduction programmes should be integrated prevention-and-treatment centres for drug use and viral hepatitis. Yet HCV treatment uptake remains low among PWID due to poor access to both testing and treatment, and drug injecting has in fact been an exclusion criterion for DAA therapy in many European countries until recently. The biggest challenge, Farrell said, remains a broad lack of funding. One major barrier, however, could be overcome fairly easily: the common requirement that HCV testing be administered or supervised by medical personnel, who are expensive and often distrusted by PWID. At the same time, he said, training is greatly needed among harm-reduction staff and volunteers.

The evidence behind U = U (undetectable = untransmissable)

Valentina Cambiano (University College London) presented findings from studies providing support for the statement that PLHIV who achieve viral suppression cannot infect other people with HIV. The idea is widely known as U = U, a slogan that the Prevention Access Campaign launched in 2016. Cambiano went through the evidence from several studies of gay and straight serodiscordant couples; during 147 000 condomless sex acts with a virally suppressed partner (defined as having a viral load of less than 200 copies/mL), there were 0 cases of transmission. The evidence that U = U is thus quite strong, but now the message needs to become universally known – not only to encourage people to get tested and treated, but also to reduce HIV-related stigma and discrimination among healthcare workers and the general public.

Implementation of self-testing in the countries of Eastern Europe: the Belarusian experience

Viatcheslav Grankov (WHO Belarus) said that at 0.2%, HIV prevalence in Belarus is one of the highest in the European Region. In 2017, the country introduced a "treat everyone" policy and tested 17% of its entire population, yet discriminatory laws and the stigmatising attitudes of medical providers still discourage members of key populations from being tested, while a weak civil society precludes most community-based testing. The publication of the WHO guidelines on self-testing were critical in persuading the government to permit it. As part of a vast national testing campaign, anonymous self-testing was rolled out in 2017 and 2018, supported by informational materials, a hotline, a referral system – and significantly, the training of pharmacy workers, who are the point of

contact for self-testers. The locally produced tests cost less than $3 apiece, and uptake has been good. The biggest challenge remains linkage to confirmatory testing and treatment.

Partner notification: high potential but limited implementation

Tom Platteau (Institute of Tropical Medicine, Antwerp) reviewed the practice of partner notification for people who have been diagnosed with an STI, including HIV. Sometimes the diagnosed patient does the notifying; other times, a healthcare provider is involved. Traditional contact methods (personal meeting, phone call, letter) have often been preferred, but now that many people find sexual partners online, SMS's and emails can be equally appropriate. Some online platforms also permit anonymous notifications, though to counter abuse, they may require a code from the healthcare provider. Despite being a highly effective intervention recommended by ECDC, the International Union Against Sexually Transmitted Infections (IUSTI) and WHO, partner notification remains underutilised. Provider barriers include time constraints and lack of familiarity with the intervention, while patient barriers include poor recall, lack of contact details, and fear of shame, stigmatisation and physical harm, though few adverse consequences have been reported.

Discussion

Sergey Golovin (International Treatment Preparedness Coalition (ITPC)) asked for a standard definition of undetectable viral load for U = U. **Valentina Cambiano** said that while the studies reported no transmissions for viral loads below 1000 copies/mL, most of the data were for loads under 200 copies/mL. There's also very little evidence on whether virally suppressed PWID can transmit HIV through shared injecting equipment. Regardless of risk behaviour and viral load, however, she felt confident that people couldn't transmit the virus as long as they were virally suppressed and adhering to treatment.

Tetiana Deshko (Ukrainian Alliance for Public Health) suggested offering incentives to recently diagnosed PLHIV for bringing someone else who might be infected in for testing; when they tried it in Ukraine, their testing yield increased tenfold. She also said that ART coverage was low because Ukraine was paying 10 times the market price for antiretrovirals. **Viatcheslav Grankov** advocated using the approach they use in Belarus: manufacturing generic drugs in country.

Daniel Simões (University of Porto) said that lay provider testing can facilitate partner notification just as well as medical providers, and he asked how the approach would need to be adjusted to work with PWID or sex workers. **Tom Platteau** said that most research on partner notification has been confined to MSM, and while online tools and platforms can be used by anyone, studies of acceptability and needs should be conducted for other key populations to improve targeting. **Ben Collins** (European Testing Week) asked people to remember the title of the session: "Combination prevention". He said that it was important to regard all of the interventions discussed as part of the prevention toolbox, rather than something to use in isolation.

PARALLEL SESSION 1: MONITORING AND EVALUATION

Major contribution, little public funding: the role of checkpoints in HIV detection in four Southern European countries

Miguel Rocha (Checkpoint LX, Lisbon) defined a checkpoint as a community-based centre that offers peer-led HIV prevention, testing and treatment services to the MSM community. Studies show that checkpoints increase testing uptake among MSM and diagnose HIV patients earlier than clinical services. In 2015–2017, two checkpoints in Greece were responsible for identifying an average of 37% of the new MSM cases reported to ECDC; for another four checkpoints in Italy, Portugal and Spain, the corresponding proportions were 0.4%, 23% and 9%, respectively. Rocha called for greater public investment in checkpoints, which often receive little public funding despite their substantial contribution to the HIV response.

HIV dynamics in the most affected part of the EU: a tale of two countries

Lise Marty (Inserm) said that in 2016, Estonia and Latvia both reported about 1.8 new HIV diagnoses per 10 000 population – the highest rates in the EU. By utilising a back-calculation model that used the clinical stage of HIV infection at diagnosis to estimate time of infection, researchers showed that PLHIV tend to present earlier in Estonia than Latvia, and while the actual number of new infections was steadily declining in Estonia, it was actually increasing in Latvia. They estimated that in 2016, there were 2.1 new infections per 10 000 in Estonia and 3.4 per 10 000 in Latvia. While PWID are still the hardest hit in both countries, most new and undiagnosed infections are sexually transmitted.

"Routine testing" as the primary reason for getting tested for HIV among MSM: results from the first participants enrolled in the COBA-Cohorts project

Nicolas Lorente (Centre for Epidemiological Studies on STIs, HIV, and AIDS of Catalonia) described the initial results from Denmark, France and Portugal of a study examining the reasons for routine HIV testing among MSM recruited at community-based voluntary counselling and testing (CBVCT) services for the COBA-Cohorts. The most common reason given for testing was "Regular control and/or to know my health status", mentioned as a reason by 72% of the respondents, followed by 38% who said they tested in response to risk exposure – suggesting that HIV testing is becoming normalised among MSM. Routine testing was found to be associated with returning for testing, being younger, identifying as gay and consistent condom use. MSM who had higher risk exposure and who identified as bisexual were less likely to test routinely.

National multistakeholder-produced standards for HIV partner notification improve outcomes

Ann K. Sullivan (Chelsea Westminster Hospital) compared the results of HIV partner notification in United Kingdom sexual health clinics before and after adoption of national standards for such notifications. The standards were developed in 2015 with the integral involvement of key stakeholders. A 2013 audit showed that an average of 0.45 contacts were verified for every new diagnosis; after the standards were implemented, a 2018 audit found 0.90 verified contacts per diagnosis. Additional standards included the proportion of contactable contacts tested. Seropositivity among tested contacts was about 20% for both audits, underscoring the importance of standards and other efforts to improve implementation of this highly effective intervention.

Independent of injecting drug use, being a foreign national is associated with risk of reactive HCV screening in EU community-based testing services

Anna Conway (Public Health Agency of Catalonia) presented an analysis of who was tested for HCV – and who had reactive tests – in 14 community-based HIV testing services in seven EU countries from 2014 to 2017. Although the number of PWID tested was quite small, almost a third of them had reactive tests. Migrants who were tested also had a significantly higher percentage of reactive tests, independent of injecting drug use. Since community-based HIV services are utilised by a large number of people who don't access government healthcare services, Conway recommended that they target PWID and migrants from high-prevalence countries for HCV testing.

PARALLEL SESSION 2: COMBINATION PREVENTION

On social media mining for PrEP

Christine Kakalou (Centre for Research & Technology Hellas (CERTH)) described a study of trends in Twitter tweets related to PrEP during the last four months of 2017. More than 32 000 tweets in English were gathered. Analysis using natural language processing showed that overall sentiments were positive, in part due to 23 accounts that posted heavily – the PrEP "influencers". The global distribution of tweets showed a correlation with countries that had approved or piloted Truvada. The number of PrEP tweets increased steadily during the study, with a large spike

on World AIDS Day. Main concerns included stigma, cost, insurance coverage and side-effects. Such analysis can provide insights from underrepresented groups as well as information that users may be reluctant to share with healthcare providers.

HIV infection and associated risk factors among cis female, trans female, and male sex workers in Greece: innovative evidence from Red Umbrella Athens

Maria Xanthaki (Red Umbrella Athens) shared the results of a study based on structured interviews with sex workers in Athens and Thessaloniki. HIV seropositivity was found to be significantly associated with injecting drug use and with use of psychoactive substances during sex, including alcohol. No significant correlations were found with any other factors, including the number of partners or a failure to use condoms. While the findings are in line with other EU studies of sex workers and HIV, this study was the first to examine transmission risks among Greek sex workers.

A nationwide combination-prevention success in England: intensified testing and earlier treatment reduces HIV transmission in MSM, as well as benefiting others

Noel Gill (Public Health England) explained that – despite a scale-up in behavioural prevention, a steady increase in testing frequency, and a marked reduction in time to treatment – the number of new HIV diagnoses among English MSM continued to rise steadily until it finally began to decline in 2016. Using CD4 counts at diagnosis to estimate time of infection, however, found that the number of underlying new infections actually began declining four years earlier, in 2012, albeit against a backdrop of increasing bacterial STIs and condomless sex. Gill said that the further decline in diagnoses and the expansion of PrEP use, especially since 2016, bode well for HIV elimination.

Programmatic mapping and size estimation of key populations in Istanbul and Ankara

Deniz Gokengin (Ege University) began by noting that although HIV prevalence is low in Turkey, the national epidemic is growing rapidly and there is no access to prevention services. Gokengin outlined the findings of the first study to estimate the size of key populations in the country. Through 5000 interviews, the authors estimated that there were roughly 28 000 female sex workers, 12 000 transgender sex workers and 6000 MSM associated with thousands of specific locations in Istanbul and Ankara. In addition, they estimated that about twice as many MSM preferred to meet sex partners online or through apps. They also classified locations and noted movement patterns and times of peak activity – information that should prove invaluable for outreach efforts.

Contribution of anonymous partner notification service on HIV/STI detection at a community-based sexual health centre for MSM

Miguel Rocha (Checkpoint LX) described an online partner-notification service implemented at a checkpoint in Lisbon. In 2015, Checkpoint LX began using CheckOUT, a web-based anonymous partner-notification service. Over the next three years, peer testers gave 897 MSM who had an HIV diagnosis or reactive test a short-term login to CheckOUT; 90 people used their logins to send 516 SMS's and 20 emails. During this period, 50 MSM said they were requesting an HIV rapid test because of an anonymous notification, and 15 requested an STI appointment for the same reason. These tests resulted in 2 diagnoses for HIV, 4 for syphilis and 1 for chlamydia. The overall cost of the notification service was only €15.

PLENARY SESSION: FAST-TRACK CITY INITIATIVES: HOW TO EXPAND TO OTHER DISEASE AREAS

HIV and stigma: can global initiatives help push the agenda?

Yusef Azad (National AIDS Trust (NAT), UK) said that HIV-related stigma is inextricably bound up with other forms of prejudice, and that they all need to be addressed holistically with a rights-based approach. It also makes sense to

integrate anti-stigma strategies for HIV, viral hepatitis and other diseases. He praised the concreteness of the UNAIDS goal of eliminating stigma in healthcare settings and the WHO Europe goal of abolishing all discriminatory laws and policies, and he hailed the work of the Stigma Index and the stigma pillar in the Fast-Track Cities initiative. He highlighted Kyiv's pilot of an anti-stigma strategy in healthcare settings, which has been remarkable successful, halving confidentiality breaches and more than doubling linkage-to-care rates. Azad ended with a call to address stigma in testing policies; to improve complaint procedures; to conduct skill-based training of health workers, using participatory approaches and involving PLHIV; and to gather data on stigma in healthcare, monitor change, and share and implement effective interventions.

> Stigma is the main barrier to ethical, effective voluntary HIV testing across Europe. Yet in 2018, only 11 countries in the entire Region reported addressing it as a testing barrier.
>
> *—Yusef Azad, NAT*

Fast-tracking municipal HIV/TB responses for vulnerable populations: examples from Eastern Europe and Central Asia

Tetiana Deshko (Ukrainian Alliance for Public Health) presented the HIV/TB Cities project, which operates in five cities across Eastern Europe and Central Asia. Its two goals are to develop an HIV/TB model that will help cities achieve the three 90s, and to increase the sustainability of HIV and TB responses in a region where local areas are increasingly expected to assume responsibility. The project has experimented with new targeted services, such as the region's first injection room and pharmacies as service providers. Each city has a coordinating mechanism that involves community members in decision-making. The project also partners with the Fast-Track Cities and Zero TB Cities projects. It has managed to mobilise $3.5 million in funding from the cities due by cultivating municipal authorities as advocates, for instance by bringing them on intensive harm-reduction courses. With support from the Global Fund, HIV/TB Cities is now expanding with 12 new cities.

A pilot project for integrating HCV/HIV/TB screening in primary healthcare settings

Maia Tsereteli (Georgian Center for Disease Control and Public Health) explained that, despite an ambitious free hepatitis C programme that screened more than a million Georgians and treated more than 50 000, the government decided to intensify its approach in order to achieve HCV elimination by 2020. With strong political backing and Global Fund financing, it piloted an integrated testing and treatment programme in primary care, drawing on community involvement and municipal leadership and supported by provider training and a major promotional campaign. The result is a decentralised public–private partnership that has increased HCV screening coverage by 60% in the pilot region. It has also led to a stronger health system and greater commitment to testing for and treating HIV and TB, as well as decreased stigma associated with all three diseases. The health ministry has now begun to roll out the model nationally.

Roundtable discussion: the role of the fast-track cities in the responses to other epidemics in Eastern Europe

Udi Davidovich (Amsterdam Public Health Service) said that in Amsterdam, a Fast-Track City, they realised they couldn't just cut and paste their approach to HIV for hepatitis C. With HIV, they had focused on what interventions made sense at each step of cascade; with HCV, their focus has been on knowledge and interventions aimed at specific stakeholders, such as educating doctors about the sexual transmission of HCV and introducing HCV prevention in sex clubs. He said that the initiative has involved community members in shaping interventions to a greater degree than any other HIV efforts in the Netherlands.

Sophocles Chanos (Athens Checkpoint) said that the urban concentration of resources and communicable diseases mean that city actions can significantly affect national outcomes and inspire the national response. Without political will and sustainable funding, however, progress will be limited. **Wolfgang Philipp** (European Commission

Directorate-General of Health and Food Safety (DG Sante)) noted that while the EU has been investing a tremendous amount of money in integrated responses to HIV, viral hepatitis, STIs and TB, it has no direct involvement in Fast-Track Cities. The initiative makes good sense because it engages communities at the local level, he said, and it represents a major step forward for many cities.

Ganna Dovbakh (EHRA) requested that Fast-Track Cities involve law enforcement in their working groups, in order to address police actions and attitudes, which she said were more problematic in many cities than stigma in healthcare. She mentioned that nine Eastern European community networks have been running a campaign with the slogan "Chase the virus, not people". **Yusef Azad** agreed that the cities are the ideal place to address such issues because police forces tend to be organised on a municipal basis. Training and education can help focus police on disease prevention instead of arrests and minimise harmful police misstatements to the press about how HCV and HIV are transmitted.

Tetiana Deshko pointed out that cities control lots of unutilised advertising space that can be used to address stigma and promote prevention and testing, something that the HIV/TB Cities project has had great success with, for instance by sponsoring murals. Given that many Fast-Track cities are tech hubs, she wondered if they couldn't partner with more tech firms to improve the targeting of testing and anti-stigma messages. **Udi Davidovich** argued that cities should be approached first about partnering on issues like normalisation and destigmatisation rather than financing, which can take years and is easier to secure once municipal authorities have been engaged.

PLENARY SESSION: EU HEALTH PROJECT SYMPOSIUM: INTEGRATED TESTING AND SYNERGIES

Service integration: reaching the homeless population

John S. Lambert (University of Dublin) described the EU-supported HepCare Europe project's activities in Ireland, where 80% of people with hepatitis C are PWID. In an initial effort to refer homeless people to hospital for HCV, only 18 of the 51 referrals showed up for the first visit, and just 2 achieved sustained virological response (SVR). Since HCV treatment is available only through hospitals, an alternative "shared care" model was designed as a collaboration between a homeless methadone treatment centre and a local hospital. After a single hospital visit to initiate treatment, patients receive oral DAAs from the community pharmacy that dispenses their methadone. A GP trainee at the centre is responsible for clinical care, and peer workers provide adherence support. Among 25 homeless patients who enrolled, 18 finished treatment with no viral load, 5 remain on treatment and 2 dropped out. Of those who attend Irish hospitals for HCV treatment, 90% are not PWID and thus pose low risk of transmission risks, making programmes like this crucial for achieving elimination.

> The number one thing on their list is not hepatitis C treatment. It's being homeless – and maybe surviving the winter.
>
> *—John Lambert, University of Dublin*

Options for integrated TB, HIV and viral hepatitis service delivery in Romania

Gerard de Vries (KNCV Tuberculosis Foundation) outlined the efforts of Early Detection & Treatment of Tuberculosis in Europe (E-DETECT TB), an initiative co-funded by the EU, before describing one of its outreach projects that performs mobile screening in Romania. Although national TB notifications have declined significantly since 2002, the country still has the highest TB burden in the EU/EEA; there has been no corresponding decline among vulnerable populations, who are ten times as likely to have TB; and coinfection with HIV and viral hepatitis is common. The project uses a specially outfitted van to screen prisoners, drug users, the homeless and Roma individuals using digital X-rays and computer-aided TB detection software. It also provides social services, peer advocacy and linkage to care, and aims to screen 12 500 people annually. De Vries suggested that Romania consider implementing two other

forms of integrated services used in E-DETECT TB: rapid point-of-care testing for HIV and viral hepatitis, and integrated care pathways for coinfected patients.

INTEGRATE: innovation of disease-specific tools in an integrated combination-prevention IT tool

Lella Cosmaro (Italian League for Fighting AIDS, Milan (LILA Milano)) began by sketching out the work of INTEGRATE, which is halfway through its three-year activity period. She then focused on the joint action's effort to develop a new integrated information and communication technology (ICT) tool consisting of combination-prevention programmes for HIV, viral hepatitis, STIs and TB. This tool is building on existing tools, particularly those developed for HIV prevention and testing. After a peer review of 115 tools and a mapping exercise, 7 tools were chosen to form the basis for the new integrated tool. The current design includes a risk calculator, information for each disease area, a reminder tool for testing and treatment, a PrEP component, a test finder and an anonymous partner notification tool. The integrated tool is conceived as a web application that can be tailored to different countries and target populations. After evaluation, testing and improvement, it will be piloted in Croatia, Italy and Lithuania.

Integrated testing and other services for people who use drugs

Alexandra Gurinova (Deutsche AIDS-Hilfe) presented the results of a project to improve HCV and HIV testing and linkage to care among PWID in 29 nongovernmental organisations (NGOs) in Hungary and Latvia, part of the EU Joint Action on HIV and Co-infection Prevention and Harm Reduction (HA-REACT). The project trained social workers, peer workers and nurses on rapid testing and counselling, as well as preparing informational and training materials on rapid testing. Despite increasing HCV and HIV incidence In Hungary, testing declined significantly during the project due to government actions and an abstinence-based approach to harm reduction. Drug services were shuttered in Budapest, those elsewhere were restricted to distributing one daily needle per client, homelessness was criminalised, and active users couldn't receive DAAs. In Latvia, testing increased significantly, yet not one person entered care due to the delay and cost of confirmatory testing. The project arranged a workshop where drug users, community workers discussed the bottleneck with the minister of health, who vowed to address it.

> I have a hard time hearing people call drug users a hard-to-reach population. Do they think services are *easy* to reach?
>
> —*Alexandra Gurinova, Deutsche AIDS-Hilfe*

Staff training: a way to strengthen integrated prevention and healthcare for MSM

Matthias Kuske (Deutsche AIDS-Hilfe) and **Barrie Dwyer** (Terrence Higgins Trust) presented an EU training programme for community health workers, part of the European Surveys and Trainings to Improve MSM Community Health (ESTICOM) project. An initial survey found that 90% of trainings were limited to information only; some community health workers had no access to training, especially in the eastern EU; half the trainings lacked a theoretical framework; most trainings were not monitored or evaluated; and there was a broad lack of collaboration and exchange with community workers from other countries. Moreover, most trainings did not address mental health, chemsex, newer prevention methods such as PrEP, or stigma and discrimination. The programme then developed a core EU training toolbox to address these deficiencies, with modules to increase access to prevention and testing; improve linkage to, retention in and quality of care; improve integration; and reduce stigma. The toolbox adopts a competency-based approach and is adaptable to local conditions. Successful trainer workshops and national pilot training were subsequently held with participants from nearly all EU/EEA countries.

Discussion

Teymur Noori (ECDC) applauded the ambition of these EU-funded projects but noted that previous joint actions tended to go cold after the funding period. What strategies do the current projects have for ensuring the continuation of their efforts and data? **Matthias Kuske** said that ESTICOM's large European MSM Internet Survey

(EMIS) was well aligned with national surveillance systems, and many countries are already incorporating the data. It's a different story with the other parts of ESTICOM; the European Community Health Worker Online Survey (ECHOES) is a new type of survey, and the training programme is still being implemented. The ESTICOM stakeholders will discuss the continuation of their efforts in an upcoming dissemination meeting. **Lella Cosmaro** noted that INTEGRATE made sustainability a key goal at the start. Partners are cultivating national contacts, reflecting on national barriers to health-system uptake and preparing a roadmap to ensure such uptake.

Gerard de Vries said that for the mobile outreach project in E-DETECT TB, the coordinators are in discussions with ECDC about taking on their data. Romania has applied for EU structural funds to continue and possibly expand the TB outreach efforts. **John Lambert** said that the EU and the pharmaceutical industry funded the four HepCare Europe pilots, but major government investment is now needed to scale them up. The Dublin pilot has procured government funding for another year, while the London pilot is sharing resources with E-DETECT TB and applying for non-EU funding. **Alexandra Gurinova** said that in Hungary, sustaining the HA-REACT project is out of the question because of the government's hostility to harm reduction, PWID and the homeless. The Latvian situation is much more promising, and she urged anyone working there to utilise the project protocols and the minutes of its meetings with the health minister to advocate for the work to continue.

> We don't just need to integrate how we respond to different pathogens; we also need to integrate how we address the different needs of each vulnerable population.
>
> *—Gerard de Vries, KNCV Tuberculosis Foundation*

PLENARY SPECIAL SESSION: THE ELIMINATION AGENDA FOR HIV AND VIRAL HEPATITIS: WHAT NEEDS TO BE DONE?

Wednesday, 30 January 2019

Updating WHO recommendations on HIV and viral hepatitis testing strategies and algorithms

Anita Sands (WHO) described WHO efforts to revise its recommended testing strategies and algorithms for HIV, HBV and HCV in response to changing testing patterns. For HIV, the changes including a proliferation in new kinds of tests, high retesting rates and a global decline in undiagnosed prevalence. False positives are chiefly due to suboptimal testing in low-prevalence areas, while false negatives arise mostly from testing of people on ART, PrEP or post-exposure prophylaxis (PEP). WHO is considering a single HIV testing strategy independent of prevalence and reassessing the use of Western blots and immunoblots. For HCV, it has drastically simplified its algorithm for diagnosing chronic infections. For HBV, many rapid tests aren't very sensitive, and not much is known about the impact of ART and PrEP. Sands said that for all three diseases, WHO encourages decentralisation of not only testing but also diagnosis, especially through the use of community settings. She also stressed the importance of post-market monitoring, as tests do change over time.

> If we're serious about elimination, maybe we need to be less fussy about test sensitivity and specificity. What's wrong with being occasionally wrong if more people get tested and more get cured?
>
> *—Margaret Hellard, Burnet Institute*

Micro-elimination of hepatitis C in prisons

Fadi Meroueh (Villeneuve-lès-Maguelone Prison) described how his prison has been highly successful in eliminating HCV among the incarcerated. Within 24 hours of admission, all new prisoners at his institution are offered pulmonary X-rays and testing for HIV, syphilis, chlamydia and hepatitis A, B and C. About 70% agree to testing – and as much as 95% of PWID. Twelve per cent test positive for chronic HCV and 1.4% for HIV, compared to 0.8% and 0.2%, respectively, for the general population. Dried blood spot testing is available for prisoners who cannot or don't want to have venepuncture. Patients receive DAAs once a day, and for those who are released before finishing

treatment, the rest of the treatment is delivered after they leave. Meroueh stressed the importance of coupling treatment with harm reduction; his healthcare unit has been providing needle exchange despite the refusal of the prison administration, and they've only found three cases of reinfection. In 2018, 100% of the prisoners with a positive RNA test were treated and cured.

> We don't treat patients in prison because they might spread disease after their release, but simply because they are human beings.
>
> —*Fadi Meroueh, Villeneuve-lès-Maguelone Prison*

Testing as part of HCV elimination strategies: finding the missing millions

Francesco Negro (Geneva University Hospital) began by noting that the European Association for the Study of the Liver (EASL) has now embraced rapid testing to increase diagnoses, as well as combined HBV/HCV/HIV testing, targeted testing and prison and community-based testing. As DAA costs decline, countries should do cost-effectiveness and feasibility studies to weigh birth-cohort and general population screening, especially where the epidemic is not highly concentrated. He recommended point-of-care RNA assays for confirmation after rapid testing, as it enables same-day diagnosis and treatment initiation in community settings. Evidence shows that GPs and nurses can be quickly trained to diagnose and treat HCV patients in primary care and the community, though speaking as a hepatologist, Negro underscored the importance of not missing patients with advanced disease. Looking forward, he expects point-of-care diagnosis using RNA assays connected to a smartphone to be possible soon, as it now is with HIV, followed by smartphone-connected elastography.

Panel discussion: how does the integration agenda support the elimination agenda?

Ganna Dovbakh (EHRA) described how for PWID, government testing and care services can seem all too effectively "integrated" with law enforcement and prisons. She called for health professionals to pursue viruses not people, and for policy- and decision-makers to focus on more appropriate services to integrate and fund – especially harm reduction. **Sergey Golovin** (ITPC) called upon the professional community in Eastern Europe and Central Asia to incorporate two things into their treatment guidelines and policies: universal, non-discriminatory access to treatment, and task-shifting and decentralisation in treatment delivery. **Antons Mozalevskis** (WHO Europe) made two arguments for why countries should move from separate single-disease programmes to an integrated, people-centred model. First, integrated models have the potential to be more effective, whether the country targets key populations or takes a settings-based approach. Second, scaling up will require shifting testing and treatment from specialist to primary care – and primary care is by nature integrated.

Eberhard Schatz (Correlation Network) said that to community testing providers, professional associations have always seemed like well-defended castles, so he was positively surprised to hear a member of EASL's governing board support remote diagnosis and task-shifting. **Francesco Negro** clarified that while he wasn't speaking for EASL, they were certainly discussing those subjects. He said he supports decentralised care because it's hard to get people to enter castles, and that artificial intelligence would be forcing specialists to relinquish control. **Anita Sands** (WHO) said that one area where different disease programmes need to coordinate more is the procurement of laboratory instruments, which will save money. She also urged testing providers to consider alternatives to outright purchasing, such as reagent leasing.

> To integrate is to accept collaboration.
>
> —*Francesco Negro, Geneva University Hospital*

PARALLEL SESSION 3: INTEGRATED TESTING STRATEGIES

High prevalence of undiagnosed HBV, HCV and HIV in urban emergency department attendees in England: a case for opportunistic testing?

Zameer Mohamed (Imperial College London) presented the results of the ENABLE study, which tested blood samples from 5400 adults presenting at four emergency departments in London, Blackpool and Liverpool. Tests were performed for HBV, HCV (RNA+) and HIV. The study found that on average, site attendees had a prevalence of 3.4% for at least one infection. The prevalence rate for previously undiagnosed infections was 2.2%, including the vast majority of infections found at the two London sites. Routine emergency department testing thus provides a cost-effective way to identify infections in people who may otherwise not come in contact with the healthcare system.

An online sexual health service using digital technology to increase access to HIV testing in London

Gillian Holdsworth (Sexual Health, 24 Hours a Day (SH:24)) described SH:24's online provision of confidential self-sampling kits for HIV, syphilis, chlamydia and gonorrhoea in the London area. Orders have increased rapidly, while the kit return rate increased from 67% in 2015 to 81% in the first half of 2018, due to improvements made to the instructions after consultation with users. For reactive HIV tests, SH:24 phones the user to communicate results and arrange confirmatory testing. Tested samples have had a 1.1% positivity rate, concentrated among MSM. Of 1023 reactive samples, 31 resulted in new HIV diagnoses while 222 samples were from previously diagnosed PLHIV, 472 tested negative and no results were reported for the remainder.

Tuberculosis in the time of HIV: what impedes Romanian PWID from accessing TB diagnosis and treatment services? Results from a mixed-methods study

Ludmilla Verdes (Romanian Association Against AIDS (ARAS)) described a study exploring ways to improve PWID uptake of TB services and identify barriers to access. Three different methods were used to refer Bucharest PWID suspected of TB to TB services. The PWID showed a strong preference for referral with a gift certificate, with some interest in accompanied referrals. Small focus groups and individual interviews identified several significant barriers to access: concerns about personal appearance and odour, inconvenient appointment times and restrictive hospital conditions. They also revealed strong associations between a lack of health-seeking behaviour and both poor mental health and a preoccupation with procuring drugs.

Hepatitis B and C testing strategies in healthcare and community settings in the EU/EEA: a systematic review

Lara Tavoschi (University of Pisa) presented key findings from a systematic review, undertaken by ECDC, on the effectiveness of different hepatitis B and C testing strategies in the EU/EEA. Provider-initiated testing and educational interventions targeting GPs increased testing offer and uptake in primary care, while in hospitals, oral HCV testing and national awareness-raising campaigns also increased uptake. HCV rapid tests and dried bloodspot sampling increased uptake in various specialised healthcare services, as well as in community settings targeting risk groups. Other effective strategies included a universal test offer (antenatal clinics), the use of guidelines and clinical tools (STI clinics) and educational interventions and awareness campaigns targeting PWID, the homeless and migrants (community settings). Tavoschi concluded that a diversified approach is called for.

> In structuring national testing strategies, combining different interventions is *the* way to go.
>
> *—Lara Tavoschi, University of Pisa*

Evidence-based public health guidance for integrated HBV, HCV and HIV testing in the EU/EEA

Ann K. Sullivan (Chelsea Westminster Hospital) outlined the development of the newly published ECDC testing guidance, which is designed to increase HBV, HCV and HIV testing while encouraging integration of testing interventions for all three viruses. Drawing on systematic reviews, expert opinion and best-practice cases, the guidance provides 34 distinct pieces of advice, including recommendations on self-testing and partner notification, as well as optimal testing frequencies for members of risk groups and a suggested monitoring framework. The guidance also points out areas where more research is particularly needed: implementation, integration, partner notification, self-testing and self-sampling, as well as what works outside Western Europe.

PARALLEL SESSION 4: LINKAGE TO CARE

HepCheck: enhancing HCV identification and linkage to care in vulnerable populations through intensified outreach screening

John S. Lambert (University of Dublin) described the results of HepCheck, a HepCare Europe initiative to enhance hepatitis C diagnosis and linkage to care among high-risk populations in 90 community addiction, homeless and prison services in Ireland, Romania, Spain and the United Kingdom. As of June 2018, about 2800 people had been offered HCV screening, which three quarters of them agreed to. Active infection was identified in 19% of those tested, a third of whom were new cases. Among those who had been previously diagnosed, more than 70% had been lost to follow-up. Within HepCheck, 80% of the diagnoses were linked to care. Lambert concluded that community-based rapid diagnosis and linkage to care is critical to eliminating HCV in these populations.

> The support that's available to Irish HCV patients outside of research studies: €30 million for drugs, zero for implementation support and linkage to care. It could be raining drugs in Ireland, but most of the people who need treatment won't get it.
>
> *—John S. Lambert, University of Dublin*

HepLink and hepatitis C care for risk groups: findings from an observational study in primary and community settings

Irina Ianache (Victor Babes Clinical Hospital for Infectious and Tropical Diseases) presented the work of HepLink, another HepCare Europe initiative. HepLink looked at HCV prevalence and management among 530 PWID at 30 primary care and community-based services in Bucharest, Dublin, London and Seville. Although the results varied greatly, suboptimal referral, attendance and treatment rates meant that few PWID started treatment, including just 3% of those who tested antigen-positive in London. To improve outcomes, HepLink developed a model of care consisting of educating primary and community providers, using a nurse trained to provide HCV clinical support and outreach, and staging liver disease at community sites.

National data collection on HIV, viral hepatitis and STI testing and linkage to care in the European Region: an INTEGRATE review

Anna Conway (Public Health Agency of Catalonia) reported on a study of the tools and methods being used to incorporate testing and linkage to care data into national surveillance and monitoring systems. A survey and desk review found that testing data is more commonly collected for HIV than the other diseases. Only about half the countries studied appear to collect such data from community-based settings, data quality varies considerably, and use of standardised indicators is still more the exception than the rule. Collecting good linkage-to-care data poses several challenges, especially for community testing, including lack of coordination and differing definitions of linkage to care. A variety of European initiatives are promoting the harmonisation of testing indicators and definitions. **Teymur Noori** (ECDC) offered to include a linkage-to-care question from INTEGRATE in the new short annual survey that ECDC was about to send out for Dublin Declaration monitoring.

Community-based HIV testing in the EU/EEA: a systematic review

Sara Croxford (Public Health England) summarised a systematic review of HIV testing in community settings, which has been studied less than testing in healthcare settings. Almost all the identified studies were conducted in Western and Northern Europe, with more than half in Spain or the United Kingdom. The research looked at a broad variety of community testing venues and target populations; half the venues were fixed community-testing sites and a third targeted MSM. While 10 studies used interventions such as provider training or promotional campaigns to increase uptake, few showed before-and-after data, making it difficult to assess the interventions' effectiveness. One study found that the cost per reactive test among MSM was between €2000 and €9000.

The cascade of care for a hepatitis B and C screening and care programme in Northern Dobruja, 2010–2018

Ane-Maria Schweitzer (Baylor Black Sea Foundation) outlined the results of a free viral hepatitis testing and linkage-to-care programme operated by Baylor, a Romanian NGO. In nine years, it screened 52 000 members of the general population for both HBV and HCV, with respective prevalence rates of 2.2% and 3.5%. While most of the people diagnosed with chronic infections were referred to the healthcare system, Baylor received no follow-up data on a large proportion of referrals, especially for hepatitis B patients and people who ended in private care. Of those known to have started HCV treatment, 74% completed treatment and 59% achieved SVR. For HBV, little treatment was available in the early years of the programme.

> Medical professionals like to focus on SVR success rates. As a community provider, I want to focus on the people who *aren't* eligible for treatment or *don't* achieve SVR but still need monitoring and care, as well as services that the guidelines leave out: mental health and lifestyle interventions. These things should all be part of the minimum package.
>
> *—Ane-Maria Schweitzer, Baylor Black Sea Foundation*

PLENARY SESSION 3: LINKAGE TO CARE AND TREATMENT FOR BETTER OUTCOMES: GOOD MODELS AND CHALLENGES

Defining linkage to care and challenges in monitoring it

Valerie Delpech (Public Health England) noted that linkage to care has been defined in many ways. ECDC now uses a flexible definition that facilitates the collection and comparison of national and regional data, with linkage to care considered prompt if it occurs within three months of diagnosis. This definition can be readily adapted to other infectious diseases. Delpech said that CD4 counts are also critical for assessing late presentation and estimating time of infection, though many surveillance systems still do not report them. Care itself is harder to define, and the nature of care changes as the epidemic and the response to it change. Care involves much more than treatment, Delpech said; patient well-being should be central. That means helping patients access friendly services that address their needs, including not only increasing comorbidity and polypharmacy levels as PLHIV age, but also stigma and isolation. Peer support is thus crucial to not just linkage to care, but also the ongoing provision of care itself.

> In the UK, we've got 98% of the diagnosed on treatment, yet the majority report loneliness and the loss of peer support.
>
> *—Valerie Delpech, Public Health England*

Engaging with key populations: hepatitis C testing and linkage to care in primary care and community settings

Margaret Hellard (Burnet Institute) said that reaching the 2030 mortality and incidence targets requires treating late liver disease – and PWID. Yet many countries continue to withhold DAAs from people with drug and alcohol

histories, despite evidence showing that DAAs are effective for everyone. And while treatment typically involves a couple of daily pills, most European countries still don't permit it outside hospitals. The PRIME study showed that people referred to primary care are twice as likely to start treatment and achieve SVR as those referred to tertiary care. Elimination will thus require providing treatment in primary care and community-based settings. Hellard called for using a variety of treatment venues, including mobile vans, pharmacies and telehealth. Since most people won't wait around two hours for "rapid" test results, there also needs to be good follow-up support, which can lead to high return rates for RNA testing and initiation in care.

> I haven't been asked to talk about harm reduction today, so let me just say: harm reduction works. And harm reduction works. And in case I don't mention it again: harm reduction works.
>
> *—Margaret Hellard, Burnet Institute*

Community-based testing as part of national strategies for early diagnosis and treatment of HIV, STIs and viral hepatitis

Jordi Casabona (Catalan Public Health Agency) noted that community-based testing is now responsible for a large proportion of HIV diagnoses in many European countries, and sites are increasingly testing for viral hepatitis and STIs. Dublin Declaration monitoring now captures a fair amount of the community-based testing data from sites across the European Region, though the data are still not incorporated into most national surveillance systems. INTEGRATE has pilot projects to address this shortcoming. Last year, 26 of 40 countries still did not allow non-medical staff to administer HIV tests in community settings; fortunately, many countries are considering revising their strategies to better utilise community testing. The real challenge, Casabona said, lies not in operational obstacles but obstacles to policies that integrate community testing with healthcare testing. Overcoming them will require political recognition of the effectiveness of community-based testing and peer providers; legal recognition of peer providers, new technologies and simpler testing algorithms; and sustainable funding.

> Are we getting closer [to incorporating community-based testing services in national strategies]? We have a long way to go, but we're heading in the right direction.
>
> *—Jordi Casabona, Catalan Public Health Agency*

The role of civil society in enhancing HCV services

Eberhard Schatz (Correlation Network) depicted civil society involvement in national HCV plans as ranging from the mere provision of information to consultation, dialogue and, ideally, partnership, in which the government and civil society share responsibility for plan development and implementation. Despite the key role of civil society in driving innovation, many governments have been slow to engage civil society as a partner. Schatz said it was particularly important to involve civil society in testing vulnerable populations and reducing the gaps in the HCV cascade of care, where community and harm-reduction services should play a central role. To provide HCV services in harm-reduction settings requires the dismantling of legal and policy barriers, sustainable funding and skill-building for both medical and non-medical staff. Schatz highlighted the annual summits that the Correlation Network arranges for community-based organisations working with hepatitis C, to facilitate advocacy and the sharing of best practices across the European Region.

Discussion

In response to a question about reinfection monitoring, **Margaret Hellard** downplayed the need to monitor SVR at 12 weeks, as most people never get reinfected. She said that regular follow-up testing does make sense for people at risk, and it provides an ideal opportunity to promote preventive behaviours, harm reduction and the testing and treatment of partners. **Jens Lundgren** (CHIP) observed that primary doctors without HCV experience may feel uncomfortable assessing fibrosis and providing treatment. He argued for a shared-care structure that would provide care in the community with expert input. **Margaret Hellard** said that Australia has had success with a simple, flexible

model: any clinician or nurse practitioner can consult a hepatologist or refer a patient to one if they wish. After the first patient or two, they often realise they can handle it themselves.

Niklas Eklund (Swedish Drug Users Union) said that too often, physicians assume all PWID fit the same profile. He challenged them to take an extra minute or two to find out about their individual situations and ask them what their needs are.

> Our risks vary greatly. Some of us work in banks, some of us are living on the street. Just because we're all using doesn't mean we fit in the same small box.
>
> *—Niklas Eklund, Swedish Drug Users Union*

CLOSING SESSION: INTEGRATION OF SERVICES

Best Poster Award

Conference co-chair **Jürgen Rockstroh** (University of Bonn) opened the final session by announcing the winner of the Best Poster Award: **Tarandeep Anand** (Adam's Love Global Foundation for MSM and Transgender Health (ALGO)), for "Impact of the Adam's Love online-to-offline (O2O) model in monitoring and evaluation of the HIV prevention cascade among MSM".

Artificial intelligence in the personalised medicine agenda: integrating disease areas and settings

Jens Lundgren (CHIP) discussed how computer science and artificial intelligence (AI) can help optimise testing, linkage to care and treatment retention strategies, especially given the exponential growth in health systems data. Computers are already as good as human doctors for some diagnostic tasks; for instance, one computer algorithm has been highly successful in pre-emptively testing cytomegalovirus (CMV) infection before it develops into CMV disease, an approach that could also be used for HIV and HCV. Suspicion of acute Epstein-Barr virus infection (mononucleosis) – an HIV indicator disease that rarely triggers an HIV test – is another prime candidate for such an algorithm. A shared-care model has greatly increased PWID access to HCV services in Copenhagen by providing remote expert input to community-based testing and treatment, using a shared data lake. Lundgren also described a pilot project that has been developing a computer algorithm to predict the risk of viral failure and organ disease in HIV patients and provide individualised health prompts.

> Medical AI will be part of future health system infrastructure. That's a statement, not a question.
>
> *—Jens Lundgren, CHIP*

Quality of life and the incorporation of patient voices in decision-making and the response to HIV and viral hepatitis

Ricardo Baptista Leite (Portuguese Parliament) traced the history of the HIV and HCV epidemics in Portugal. From 2001 to 2017, HIV incidence dropped 73%, largely due to policy changes such as drug decriminalisation, infectious disease legislation developed with civil society, and a test-and-treat policy. Fast-Track Cities, PrEP and pharmacy dispensation of HIV drugs should reduce incidence further. Leite said that after an infected man angrily confronted politicians, the government announced full DAA funding for everyone, using risk sharing and volume-based pricing. More than 90% of those diagnosed with chronic HCV have initiated treatment since, saving more than 3000 lives and €200 million in the treatment of complications. He recommended Let's End HepC, a free app that lets users model the cost and health impacts of specific policy interventions in their countries. Leite said the best ways to persuade politicians to advocate a particular policy are to show how it aligns with public sentiment, provide clear data showing impact, demonstrate how it will save money (or cost little), and promise results before the next election.

Living is more than surviving. We need to address these diseases as social, lifelong conditions from a quality-of-live perspective.

—Ricardo Baptista Leite, Portuguese Parliament

Quality of life indicators: why, what and how to measure?

Richard Harding (King´s College London) said WHO defines health holistically rather than medically. Physical, mental and social well-being have become increasingly important as PLHIV live longer, and he said optimal quality of life should be a key clinical outcome. A broad consensus has been developing around the need for a fourth 90: achieving good health-related quality of life in 90% of virally suppressed PLHIV. Yet even detailed clinical assessments miss most problems that PLHIV find important. Hence the need for people-centred care – and a quality-of-life measure that can guide care, permit monitoring and comparison, drive improvements and facilitate resource allocation. Various generic and disease-specific measures have been used for PLHIV; ideally, one should use both kinds. Harding said that it's vital to remember that the patient is the expert and to partner with the community in developing and implement these patient-reported outcome measures. Use of such measures empowers patients to help guide care and assist monitoring. He stressed the importance of embedding these measures in care standards and in decision-making at all levels.

Using patient-reported outcomes to address quality of life changes the power dynamic, so that we can motivate people to enter and remain in care by delivering what matters to them.

—Richard Harding, King´s College London

Challenges ahead in Eastern Europe and Central Asia

Michel Kazatchkine (UN and Graduate Institute, Geneva) described how the expanding HIV epidemic in the eastern part of the European Region is deeply intertwined with epidemics of HCV, TB (almost 20% of it multidrug-resistant) and injecting drug use. Although the area's high rate of coinfections and pronounced overlap in risk groups for these diseases calls for an integrated, patient-centred response, the entrenched legacy of Soviet healthcare, with its highly vertical structure, poses a formidable barrier to reform. There is also a general lack of investment in prevention and attention to vulnerable groups. The extensive populations of PWID and prisoners have particularly poor access to HIV, HCV, TB and evidence-based harm-reduction services, compounded by widespread stigma and discrimination. He pointed out recent progress too: expanded and improved treatment for these diseases, significant reductions in pharmaceutical costs, updated national strategies and better surveillance. He also highlighted an encouraging example of community-based HIV/TB integration carried out by Alliance Ukraine.

Health system reforms are moving forward slowly, but that does not prevent us from focusing on and supporting community-based integration, such as combination testing and case-finding of HIV, HCV and TB.

—Michel Kazatchkine, UN and Graduate Institute

HEPHIV 2019 CALL TO ACTION

We, the participants of the HepHIV 2019 conference, call on all stakeholders in the European Region to work together toward the 2030 global targets for HIV, viral hepatitis, sexually transmitted infections (STIs) and tuberculosis (TB) by implementing the following actions:

1. Adopt an **integrated, people-centred, settings-based approach** to prevention, testing, treatment and social services for HIV, viral hepatitis, STIs and TB, implementing a "one-stop shop" model wherever practicable. The service offering should be adapted to the needs of the target population and include harm reduction, mental health services, adherence support, and housing and employment assistance when appropriate.

2. Improve the **monitoring and evaluation of programmes and services**, ensuring that surveillance indicators are harmonised with international and European guidelines, including those from WHO, ECDC and the Dublin Declaration, with respect to testing and linkage to care for HIV, viral hepatitis, STIs and TB. In addition, promote **sharing of best practices and effective models of care**.

3. Ensure the **adequate financing of the response** to the epidemics, from prevention to treatment and care, taking into consideration the needs of the most-affected groups[1] and the added value of community-based services, including peer-led services and outreach activities.

4. Work to **eliminate late diagnosis for HIV and viral hepatitis**.

5. **Align national testing strategies with European testing guidelines**:

    - include integrated testing for multiple infections;
    - tailor testing strategies to each country's epidemics, including at the subnational level;
    - ensure that testing is voluntary and confidential;
    - identify and remove all legal and regulatory barriers to the provision of testing by trained non-medical staff in order to support community-based testing;
    - make self-testing and self-sampling an integral part of testing options;
    - eliminate mandatory pre-test counselling and requirements for written consent;
    - facilitate the implementation of indicator condition-guided testing for HIV, and develop similar strategies for other infections;
    - implement voluntary partner notification, including assisted notification, taking into account the concerns of the most-affected groups;
    - increase testing frequency, particularly in the most-affected populations; and
    - promote risk awareness and empower affected populations to prevent infection and reinfection.

[1] Main-affected groups to consider for targeted services should include people who use drugs, sex workers, men who have sex with men (MSM), trans* people, prisoners, uninsured persons and migrants, including undocumented migrants, mobile and displaced populations.

6. Ensure **universal access to state-of-the-art treatment** options for HIV, viral hepatitis, TB and STIs.

7. Make **HIV pre-exposure prophylaxis (PrEP) readily accessible to everyone** who needs it, as an integral part of combination prevention programmes.

8. **Maximise access to existing testing tools and develop innovative and affordable new technologies** to address currently unmet needs, including integrated testing for different infections.

9. **Target integrated prevention, testing and treatment efforts to the population groups most affected by these infections**, providing them with flexible services in settings where they feel most comfortable.

10. **Intensify efforts to combat all forms of stigma and discrimination** associated with these infections or the groups they impact most:

    - identify and abolish all laws, policies and regulations that directly or indirectly discriminate against people living with or highly impacted by any of these infections;

    - reduce exceptionalism and normalise prevention, testing, treatment and care;

    - develop and implement tools, in partnership with the groups most impacted by these infections, to better assess levels of stigma and discrimination and develop effective interventions to address them; and

    - promote the national and regional monitoring of stigma, discrimination and the criminalisation of most-affected groups.

11. Advocate for **stronger political leadership in implementing rights- and evidence-based, data-driven public health interventions** by governments and international agencies in the European Region.

PRESS AND MEDIA COVERAGE

Sănătatea Press Group organised a press conference for local media outlets during the conference. They developed a media report on press coverage, which can be accessed here.

SOCIAL MEDIA COVERAGE

The HepHIV2019 Conference was featured on several social media channels. The hashtag #HepHIV2019 was used ahead of and throughout the duration of the conference. From 28 to 31 January, the hashtag generated over 120,000 impressions. There were also a number of Facebook posts on the EuroTEST page, which generated an average reach of 226.4 clicks and 31.5 actions.

HEPHIV 2019 BUCHAREST CONFERENCE
CHALLENGES OF TIMELY AND INTEGRATED TESTING AND CARE

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