

# Pre-exposure prophylaxis (PrEP) in Poland 2017-2021

## Lessons from a country with no national PrEP programme

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### Background

PrEP has been the mainstay of HIV prophylaxis in key populations in recent years, especially among MSM [1-3]. Nonetheless, there are still countries (especially in CEE) with no national PrEP programmes, prevalent HIV and STI stigma as well as public officers and politicians unsympathetic to PrEP and MSM health. This has left many individuals at risk of infection and led to soaring HIV incidence. As medical professionals from Polish AIDS Scientific Society we decided to develop PrEP guidelines in 2014 [1] as a tool to help build competence. PrEP clinics in Poland started to operate only when generic TDF/FTC became available in October 2017 at 28 Euros/30 tablets. Free and anonymous HIV testing was available in large cities only at voluntary counselling and testing sites (VCTs).

### Materials and methods

During annual HIV conference in Poland questionnaires were taken among medical professionals to ascertain attitudes and readiness to provide PrEP care. Dedicated questionnaires for patients were also available at PrEP.edu.pl webpage, an information exchange point for the whole country. 17 PrEP clinics run by single MDs, NGOs or as joint ventures were systematically created in largest cities.

The programme evaluation was based on actual prescriptions from Central E-Health Systems, wholesale volume to pharmacies and data from PrEP clinics. HIV prevalence and incidence among MSM in Poland were calculated based on VCT data, national registries and national reports for 2017-2021 [4].

### Results (see Table 1)

Half of the questioned infectious diseases/HIV specialists were ready to offer PrEP at their current place of work (see Fig.1), especially younger ones, while 70% were ready to work at designated PrEP clinics (see Fig.2). PrEP provision at HIV clinics has not worked out yet, however, due to red tape and MDs being overworked. Forty five percent of patients chose any doctor as their preferred venue while 24% chose either PrEP clinic or HIV testing site. However, most of the actually created PrEP venues turned out to be private with no reimbursement of medical care, testing (unless performed at VCTs) or medication. Only one large PrEP clinic offered free medical care and testing.

There was a steady increase in PrEP patients overtime with around 1000 new patients each year (smaller increase only in 2020) leading to over 4400 PrEP users at the end of 2021. With longer cumulative exposure to PrEP education and whisper campaigns both patients and MSM community started to see PrEP as an additional prophylactic method hence on-demand PrEP use increased to 35% in the last year.

Fifteen new HIV infections were confirmed during 7898 PY of follow-up yielding incidence of 0.19/100PY. Based on HIV incidence of 3.8/100PY among MSM at VCTs in Poland the relative risk reduction in our cohort was 95% and NNT 27 (almost equal cost of PrEP compared to cART – cost effectiveness study going on). If National Institutes of Health estimations of 1200 annual new HIV infections among MSM are correct we require 32.400 MSM on PrEP to prevent them.

There was no change in HIV prevalence or incidence on national level during observation period.

Fig.1 MDs readiness to do PrEP consultations at their current work place

Would it be possible to offer PrEP at your current clinic?



52% YES  
9% NO, I do not have time  
14% NO, I am not interested  
25% NO, because I do not work at an out-patient clinic

Fig.2 MDs readiness to work at PrEP clinics

If there were PrEP clinics, would you be interested to work there as a doctor?



70% YES  
21% NO, I do not have time  
9% NO, I am not interested

Fig.3 Preferred PrEP venues among patients

Where would you want to access PrEP?



45% Any doctor  
24% Testing sites  
24% PrEP clinics  
3% Somewhere else

Tab. 1. PrEP use characteristics and HIV incidence in Poland 2017-2021

|   | 10-12.2017 | 2018 | 2019          | 2021 | 2022 | 2017-2021 |
|---|------------|------|---------------|------|------|-----------|
| PrEP users at dedicated PrEP clinics [n]            | 102        | 1128 | 2633          | 2684 | 3675 | NA        |
| PrEP users outside of PrEP clinics [n]              | NA         | NA   | 394<br>(=16%) | NA   | NA   | NA        |
| Total estimated PrEP users [n]                      | 102        | 1128 | 2427          | 3220 | 4410 | NA        |
| On-demand PrEP users [%]                            | 2          | 15   | 20            | 17   | 35   | NA        |
| HTX PrEP users [%]                                  | NA         | NA   | NA            | NA   | NA   | 11        |
| MSM PrEP users [%]                                  | NA         | NA   | NA            | NA   | NA   | 99        |
| HIV incidence among MSM at VCTs in Poland [1/100PY] | NA         | NA   | 4.3           | 3.4  | 3.7  | 3.8       |

NA – not applicable; VCT – voluntary counselling and testing site; HTX – heterosexual; MSM – men having sex with men

### Discussion

We have shown that a successful PrEP programme can be set-up fairly quickly without any public funding and input, the only prerequisites being generic PrEP and motivated MDs. This set-up, however, created barriers for MSM outside of large cities as well as those who cannot afford the cost of visits or medication, mostly younger ones. This may have led to selection bias as older, better educated and highly dedicated, hence more adherent patients came forward. Continuous monitoring is necessary, especially if access and reimbursement improve. With increasing numbers of younger, high-risk, chemsex users on PrEP, poor adherence may become a real problem. In effect, incidence may increase as well as NNT and overall cost-effectiveness of the programme.

### Conclusions

Despite no financial support from Ministry of Health and no reimbursement, almost 5000 patients received access to PrEP and sexually transmitted infections care. The programme was highly efficacious with incidence similar to other PrEP projects with very adherent and dedicated patients [5-10]. Improvement in access is urgently needed, new clinics have to be set up also outside of large cities and universal reimbursement of medical care and medication implemented for rapid scale-up and actual countrywide reduction in HIV incidence.

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