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

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N. Lorente (nlorente@igtp.cat)[1,2], P. Meireles[3], M. Rocha[4], Lotte Kehlet[5], M. Ćosić [6], S. Chanos[7], G. Polkas[7], S. Morel[8], D. Rojas Castro[8,9,10], L. Cosmaro[11], C. Agustí[1,2,12], L. Fernàndez-López[1,2,12], J. Casabona[1,2,12], COBA-Cohorts Study group

Affiliations: [1] CEEISCAT, Agència de Salut Pùblica de Catalunya, Badalona, Spain [2] IGTP, Badalona, Spain [3] EPIUnit, Porto, Portugal [4] GAT, CheckpointLX, Lisbon, Portugal [5] AIDS-Fondet, Copenhagen, Denmark [6] Legebitra, Ljubljana, Slovenia [7] Positive Voice, Ath-Thess Checkpoints, Athens, Greece [8] AIDES, Pantin, France [9] Coalition PLUS, Pantin, France [10] INSERM, UMR912 (SESSTIM), Marseille, France [11] LILA Minalo ONLUS, Milan, Italy [12] CIBERESP, Madrid, Spain

BACKGROUND

- The European HIV epidemic is still very concentrated in MSM (ECDC,WHO, 2018)
- HIV-testing is the cornerstone of HIV prevention, especially in MSM
- Community-based voluntary counselling and testing (CBVCT) services particularly adapted to MSM
  - Testing, counselling, mental support, confidence, confidentiality…
  - Reach less previously tested and high-risk MSM (Bailey et al. 2009; Champenois et al. 2012; Lorente et al. 2013; Yang et al. 2014)
  - Make linkage to care easier (Meulbroek et al. 2013)
- Monitoring data (e.g. COBATEST) is crucial for prevention providers and policy makers
- Longitudinal data are necessary:
  - Amsterdam cohort (clinic-based) (Jansen et al. 2011)
  - BCN y Lisbon Checkpoints (community-based) (Ferrer et al. 2016; Meireles et al. 2015)

COBA-Cohorts DESIGN

- The COmmunity-BAsed cohorts (COBA-Cohorts) project is a longitudinal study collecting data among HIV-negative MSM attending CBVCT services in 6 European countries
- Inclusion criteria: MSM, ≥ 18 yo, HIV-negative test result at enrolment
- Recruitment: participation offered to all eligible MSM attending one of the 17 participating CBVCT services (~18 months), since 04/02/2015 for the first site
- Follow-up frequency: based on the CBVCT services' testing recommendations and depends on the participant's willingness to get (regularly) tested

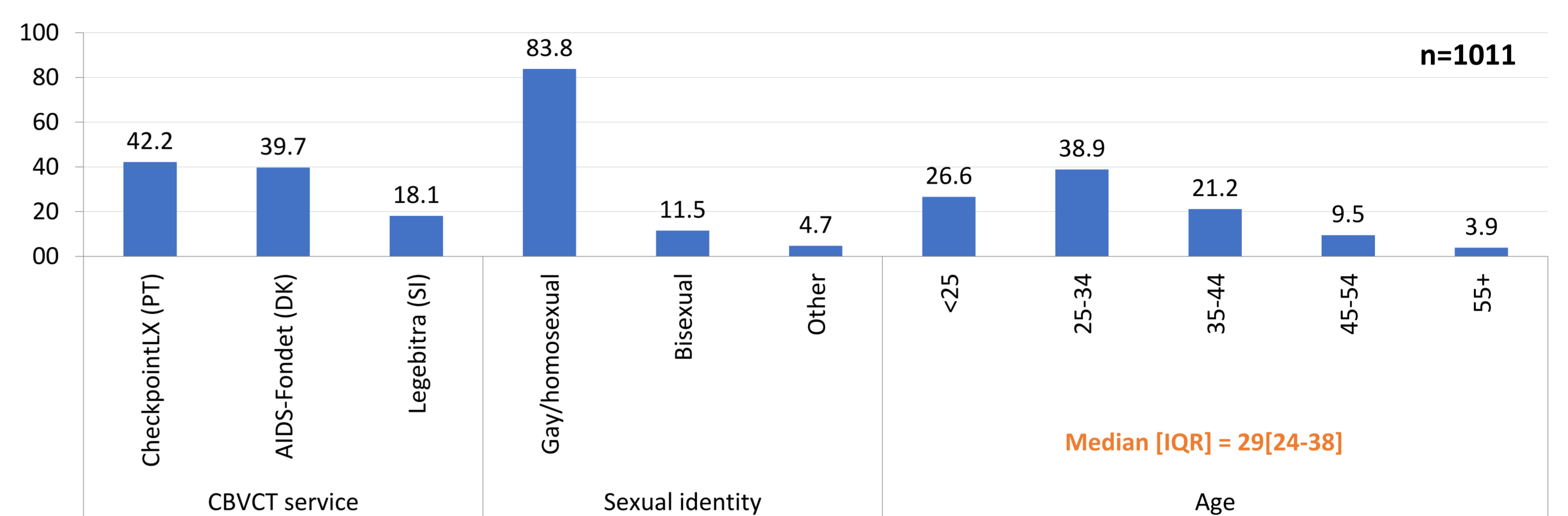Fig. 1: Participating CBVCT services

- Denmark, **Aids-Fondet** (2 sites)
- France, **AIDES** (10 sites)
- Greece, **Positive Voice/Ath-Thess Checkpoints** (2 sites)
- Italy, **LILA Milano** (1 site)
- Portugal, **GAT/CheckpointLX** (1 site)
- Slovenia, **Legebitra** (1 site)

OBJECTIVE: To identify factors associated with choosing "Regular control and/or to know my health status" as reason to get tested for HIV at entrance to COBA-Cohorts
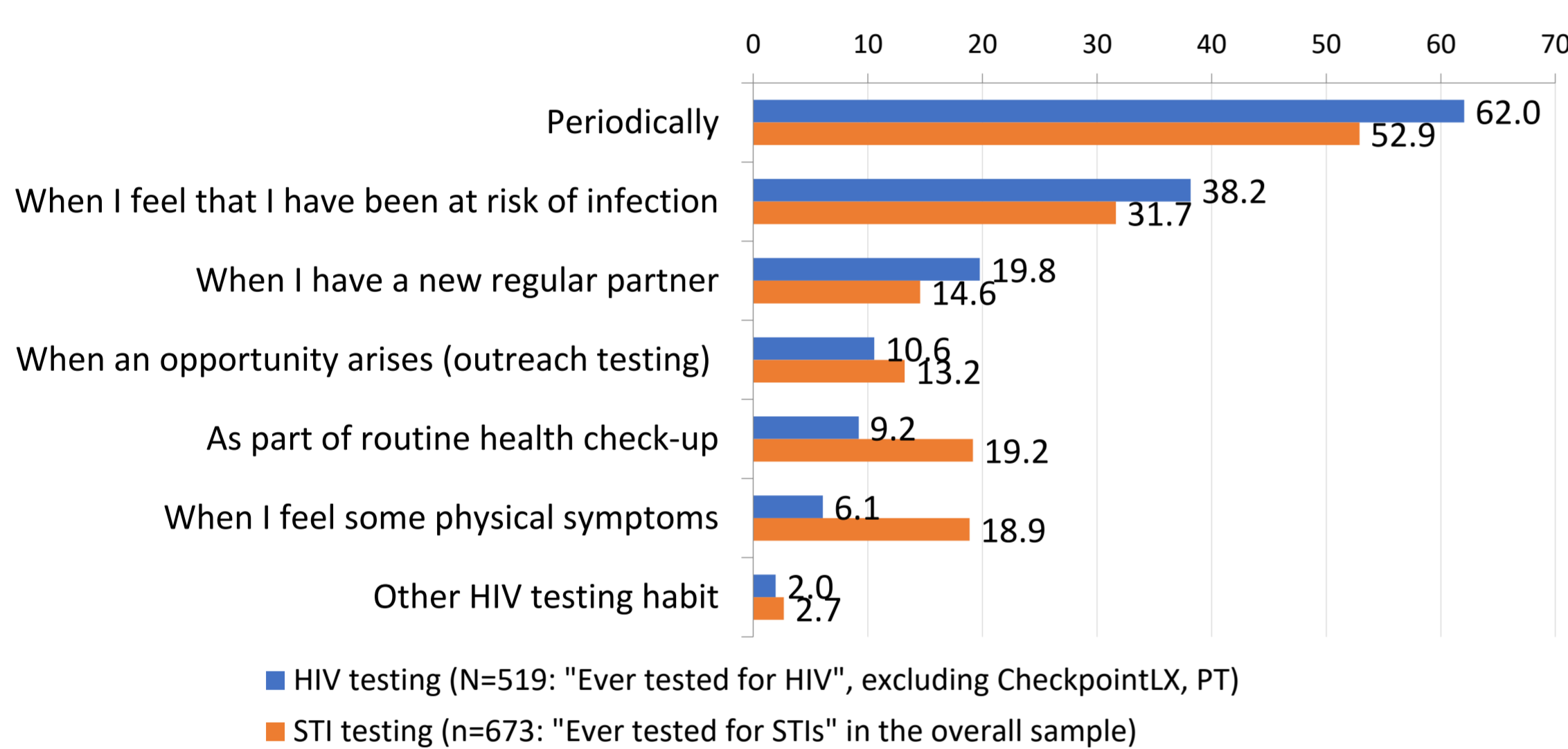
ANALYSIS

- For this analysis, participants enrolled by 31/09/2015 were selected (**n=1011**) to ensure they had the opportunity to return, i.e. data from:
  - Legebitra, Slovenia (**n=183**)
  - AIDS-Fondet, Denmark (**n=401**)
  - CheckpointLX, Portugal (**n=427**)
- Factors associated with "routine testing"
  - Chi-square and Kruskal-Wallis tests were used for all univariate comparisons, with a significance threshold of 0.10
  - All significant associations were then included in a multivariate logistic regression model
  - The final model was obtained using a forward-stepwise selection method based on the Wald test (entry threshold p-value < 0.05)
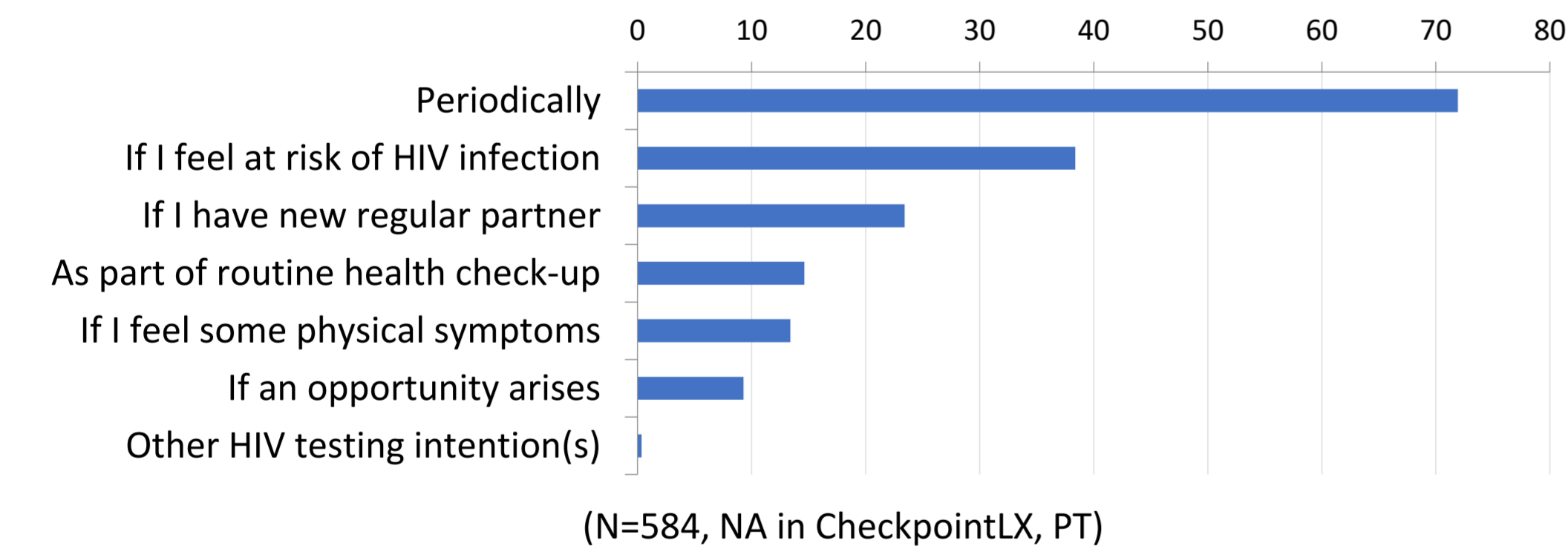
SAMPLE CHARACTERISTICS

n=1011

CheckpointLX (PT) 42.2, AIDS-Fondet (DK) 39.7, Legebitra (SI) 18.1 — CBVCT service
Gay/homosexual 83.8, Bisexual 11.5, Other 4.7 — Sexual identity
<25 26.6, 25-34 38.9, 35-44 21.2, 45-54 9.5, 55+ 3.9 — Age

Median [IQR] = 29[24-38]

RESULTS

HIV/STI testing habits

(values in %)

Habit	HIV testing	STI testing
Periodically	62.0	52.9
When I feel that I have been at risk of infection	38.2	31.7
When I have a new regular partner	19.8	14.6
When an opportunity arises (outreach testing)	10.6	13.2
As part of routine health check-up	9.2	19.2
When I feel some physical symptoms	6.1	18.9
Other HIV testing habit	2.0	2.7

HIV testing (N=519: "Ever tested for HIV", excluding CheckpointLX, PT)
STI testing (n=673: "Ever tested for STIs" in the overall sample)

Intention to test for HIV in the future

- Periodically
- If I feel at risk of HIV infection
- If I have new regular partner
- As part of routine health check-up
- If I feel some physical symptoms
- If an opportunity arises
- Other HIV testing intention(s)

(N=584, NA in CheckpointLX, PT)

Reasons for the baseline test

Reason	Value
Regular control/know health status	72.2
Episode(s) of unprotected anal sex *	42.7
Episode(s) of unprotected oral sex *	35.7
My partner asked me to get tested	10.0
Before dropping condom with my partner	9.7
Broken condom	9.4
Previous/current partner recently told me he is HIV+	5.9
Window period in the last test	5.4
Clinical symptoms	5.0
Other reason(s)	4.1
Episode(s) of unprotected sex with sex worker *	1.7
Episode of sharing injection material *	0.3

Outcome variable "Routine Test"

One single item in CheckpointLX (PT)

In AIDS-Fondet (DK) and Legebitra (SI):
- Regular control: 42.0%
- To know my health status: 41.2%
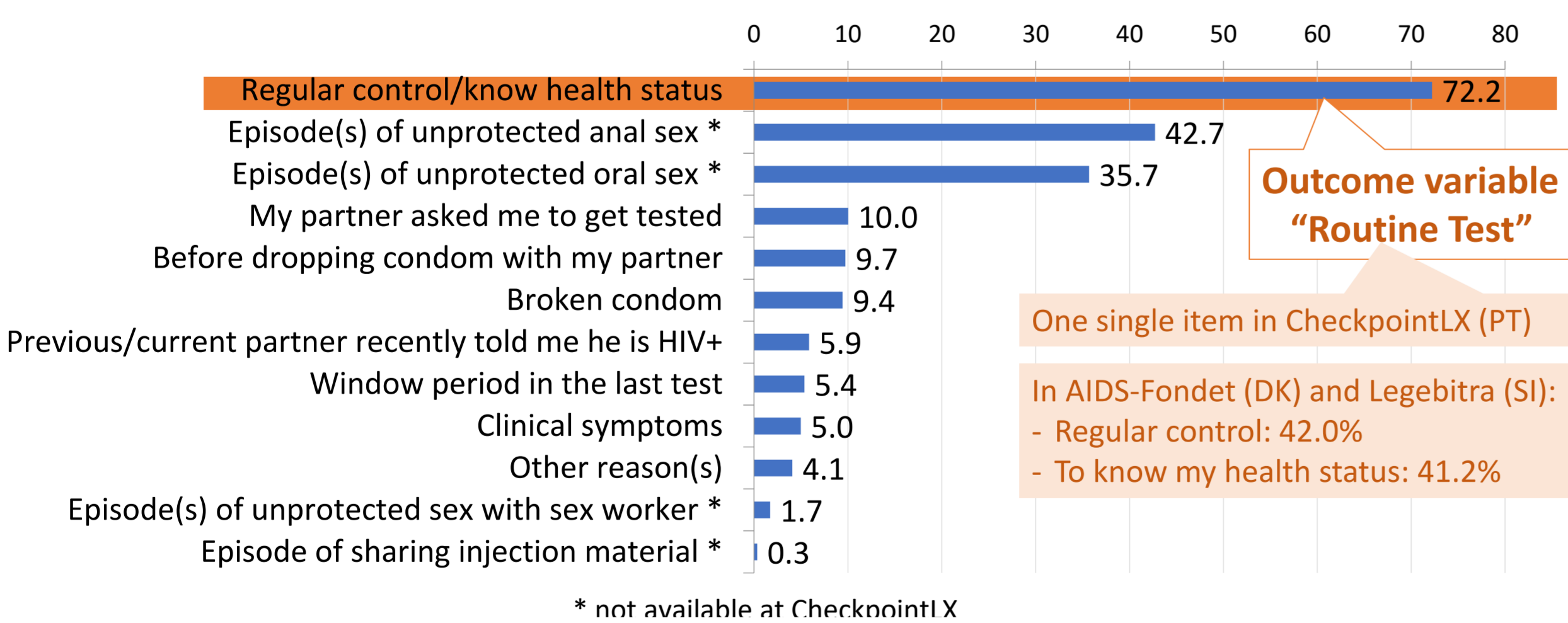
* not available at CheckpointLX

Table 1. Univariate comparisons

	Came for a routine test (n=730)	Did not come for a routine test (n=281)	Total (n=1,011)	p-value
Socio-demographics				
Age				<0.001
Median[IQR]	28[24-37]	32[26-42]	29[24-38]	
At least one follow-up visit				<0.001
Yes	49.2	36.7	45.7	
No	50.8	63.3	54.3	
Education				0.012
High school graduate or less	39.3	38.1	38.9	
First stage of tertiary education	47.5	54.8	49.6	
Second stage of tertiary education	13.2	7.1	11.5	
Sexual identity				0.024
Gay or homosexual	85	80.7	83.8	
Bisexual	9.8	15.8	11.5	
Other	5.2	3.5	4.7	
STIs history and HIV risk perception				
Ever had an STI/Hepatitis				0.071
Yes	31.3	37.4	33	
No	68.7	62.6	67	
Last risk exposition				0.041
High risk	3.9	6.4	4.8	
<6 months	68.3	77.4	70.8	
<12 months	12.9	10.1	12.1	
> 12months	10.9	8.2	10.2	
Never been at risk	7.9	4.3	6.9	
HIV/STIs testing				
Ever tested for HIV				0.001
Yes	83.1	91.3	85.4	
No	16.9	8.7	14.6	
Tested in this CBVCT in the last 12 months				0.051
Yes	35.9	29.6	31.4	
No	64.1	70.4	68.6	
Tested for STIs or Hepatitis in the last 12 months				0.038
Yes	41.6	48.9	43.6	
No	58.4	51.1	56.4	
Sexual behaviour				
All partnership types				0.006
Steady only	11.9	6.8	10.5	
Steady and casual	31.6	40.4	34	
Casual only	56.5	52.9	55.5	
Total number of partners				0.049
median[IQR]	5[2-10]	6[3-11]	5[2-11]	
Inconsistent coondom use with steady and/or casual partners				0.004
Yes	60.6	70.4	63.3	
No	39.4	29.6	36.7	

IQR: interquartile range.

Factors associated with "routine testing"

After adjustment, routine testers were significantly more likely to define themselves as gay/homosexual, to return at least once to get tested during the study period, and were significantly less likely to report inconsistent condom use with their sexual partners in the last 12 months, compared to participants who did not come for a routine test (**Table 2**).

Table 2. Multivariate analysis

	aORs	95% CI	p-value
Study partner			
AIDS-Fondet	1		
GAT/CheckpointLX	4.31	[2.91-6.38]	<0.001
Legebitra	2.19	[1.45-3.3]	<0.001
At least one follow-up visit			
No	1		
Yes	1.73	[1.26-2.37]	0.001
Age			
Median [IQR]	0.98	[0.97-0.998]	0.017
Education			
High school graduate or less	1		
First stage of tertiary education	1.01	[0.73-1.41]	0.933
Second stage of tertiary education	1.32	[0.7-2.52]	0.391
Self-definition according to sexual orientation			
Gay/Homosexual	1		
Bisexual	0.52	[0.33-0.83]	0.006
Other	1.09	[0.49-2.41]	0.830
ICU with steady and/or casual partners			
No	1		
Yes	0.71	[0.51-0.99]	0.044

LIMITATIONS

- Sample not representative of MSM tested in CBVCT services in Europe
- Reasons for testing are multiple and interrelated, here only focussing on "routine testing/to know my health status"
- Sensitivity analysis showed that the result were robust even when considering only the item "routine testing" where available

CONCLUSIONS

- COBA-Cohorts participants' attitudes towards HIV/STI testing show that routine testing has been normalised
- Regular control is the most reported reason for the baseline test, unlike other studies in CBVCT services where the most reported one was risk exposure (Gumy et al., 2012; Marcus, Gassowski, & Drewes, 2016)
- Those coming for a "routine test" were more likely to be gay/homosexual, younger and to return later for another test → "Community responsibility"? (Boydell, Buston, & McDaid, 2017)
- However, we are still struggling to test those at higher risk frequently. More efforts should be made in order to better characterise this group and identify the barriers that prevent them from increasing their testing uptake
- Longitudinal monitoring of CBVCT users is crucial to assess testing patterns among key populations

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COBATEST NETWORK

EURO HIV EDAT