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Objective

To quantify the proportion of patients that presented late at the HIV/STI clinic in Antwerp over the period 1997-2010 and to document the risk factors for late presentation as a consequence of late testing, over the last two years.

Methods

A retrospective analysis of the database of the HIV patients in follow-up at the clinic since 1997 was performed.

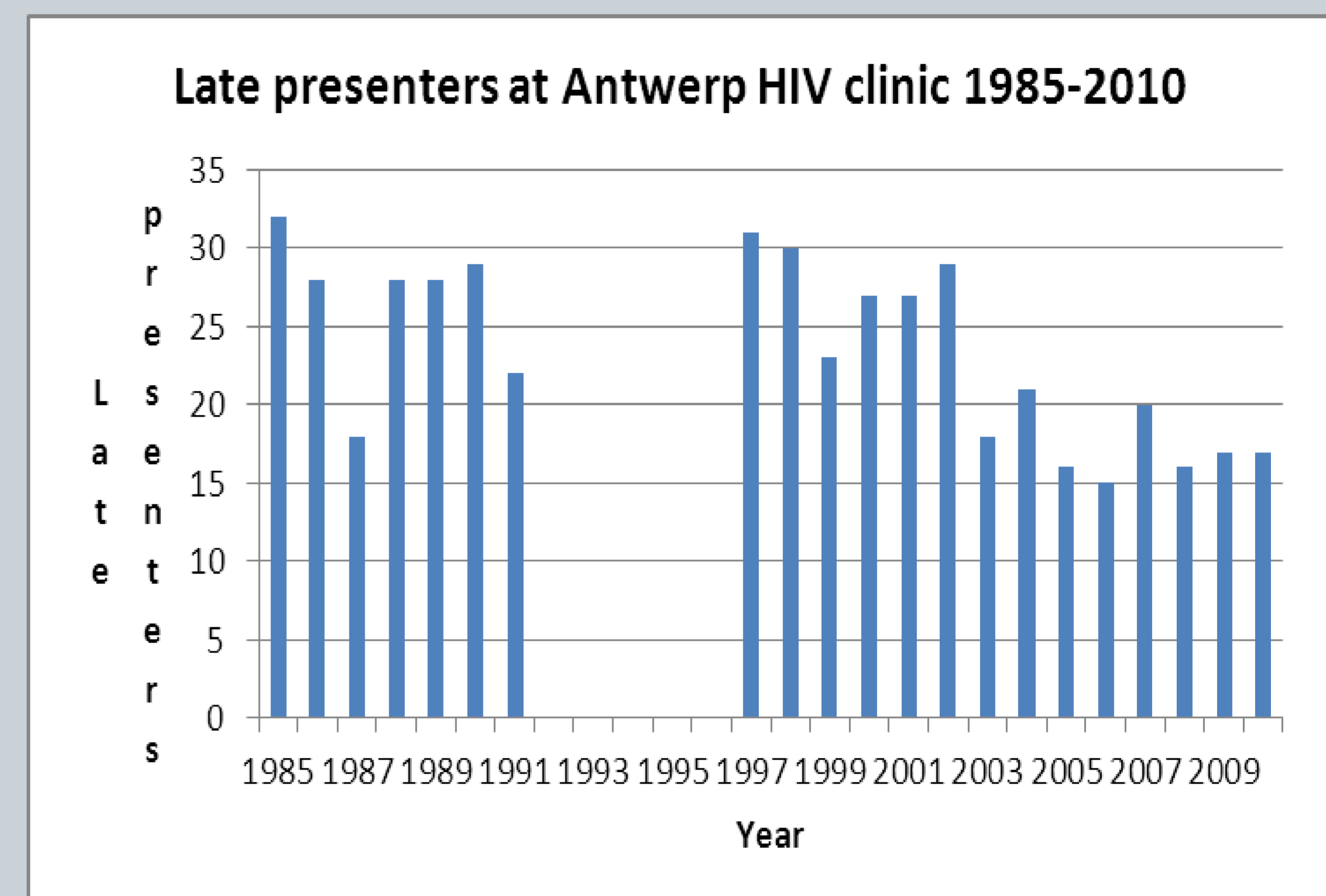
To study risk factors for late presentation a prospective case control study was used. A case was defined as a patient who was diagnosed at our clinic with a CD4 lymphocyte count of less than 200/mm³.

All participants were subjected to an anonymous structured questionnaire.

Results

On average, 21.9% (range: 15%-30.8%) of the total annual number of new patients presented late, with a significant decreasing trend over the past 14 years ($p < 0.001$).

In 2009-2010, 42 cases and 59 controls were selected. In multivariable analysis, being heterosexual (AOR: 6.6 [95% CI: 2.5-17.2], $p < 0.001$) and having complaints (AOR: 5.1 [95% CI: 1.9-13.6], $p = 0.001$) were independent risk factors for late diagnosis. Nationality was not withheld in the final model ($p = 0.100$), however non-African (AOR: 2.7 [95% CI: 0.9-8.6] and African migrants (AOR: 3.2 [95% CI: 0.9-11.9]) tended to present late compared to residents.



Missing figures because of unreliable recording system from 1992 to 1996

| Risk factor | Cases (n=42) | Controls (n=59) | Crude OR (95% CI) | P-value | Adjusted OR (95% CI) | P-value |
|--|--------------|-----------------|-------------------|---------|----------------------|---------|
| Gender | | | | | | |
| Male | 35 (83.3) | 51 (86.4) | 1 | | | |
| Female | 7 (16.7) | 8 (13.6) | 1.28 (0.4-3.8) | 0.666 | | |
| Nationality | | | | 0.006† | / | NS |
| Belgian | 15 (35.7) | 39 (66.1) | 1 | | | |
| Non-Belgian, non-African | 12 (28.6) | 12 (20.3) | 2.6 (1.0-7.0) | | | |
| Non-Belgian, African | 15 (35.7) | 8 (13.6) | 4.9 (1.7-13.9) | | | |
| Age at HIV diagnosis | | | | | | |
| < 35 years | 17 (40.5) | 28 (49.1) | 1.4 (0.6-3.2) | 0.394 | | |
| ≥ 35 years | 25 (59.5) | 29 (50.9) | 1 | | | |
| Civil status | | | | | | |
| Single/divorced | 19 (45.2) | 34 (57.6) | 1 | | | |
| Married/cohabitating | 23 (54.8) | 25 (42.4) | 1.6 (0.7-3.7) | 0.220 | | |
| Education | | | | 0.413† | | |
| Primary | 4 (9.5) | 7 (11.9) | 0.6 (0.2-1.3) | | | |
| Secondary | 19 (45.2) | 33 (55.9) | 0.6 (0.1-2.3) | | | |
| Higher/University | 19 (45.2) | 19 (32.2) | 1 | | | |
| Sexual preference | | | | | | |
| Heterosexual | 27 (64.3) | 14 (23.7) | 5.8 (2.4-13.8) | <0.001 | 6.6 (2.5-17.2) | <0.001 |
| Homosexual/Bisexual | 15 (35.7) | 45 (76.3) | 1 | | | |
| Profession | | | | 0.420† | | |
| Asylum seeker | 7 (16.7) | 4 (6.8) | 0.9 (0.3-2.5) | | | |
| Without employment | 8 (19.1) | 13 (22.0) | 2.6 (0.7-9.9) | | | |
| Employment | 26 (61.9) | 39 (66.1) | 1 | | | |
| Other (retired or student) | 1 (2.4) | 3 (5.1) | 0.5 (0.1-5.1) | | | |
| Insurance | | | | 0.401† | | |
| Complete | 31 (73.8) | 50 (84.8) | 1 | | | |
| High risk only | 6 (14.3) | 5 (8.5) | 1.9 (0.5-6.9) | | | |
| None | 5 (11.9) | 4 (6.8) | 2.0 (0.5-8.1) | | | |
| General practitioner | | | | | | |
| Yes | 25 (59.5) | 49 (83.1) | 1 | | | |
| No | 17 (40.5) | 10 (16.9) | 3.3 (1.3-8.3) | 0.010 | / | NS |
| Contact with HCW | | | | | | |
| Yes | 24 (57.1) | 31 (52.5) | 1.2 (0.5-2.7) | | | |
| No | 18 (42.9) | 28 (47.5) | 1 | 0.647 | | |
| Complaints at HIV diagnosis | | | | | | |
| Yes | 32 (76.2) | 25 (42.4) | 4.3 (1.8-10.5) | 0.001 | 5.1 (1.9-13.6) | 0.001 |
| No | 10 (23.8) | 34 (57.6) | 1 | | | |
| Complaints in the year prior to diagnosis without contact | | | | | | |
| Yes | 11 (26.2) | 8 (13.6) | 2.3 (0.8-6.2) | 0.115 | / | NS |
| No | 31 (73.8) | 51 (86.4) | 1 | | | |

NS: non-significant

* Risk factors with p-value < 0.20 during univariable analysis were considered for inclusion in the multivariable model.

† P-value obtained from likelihood-ratio test.

Conclusions

Although we observed a significant decrease in the number of patients that presented late over more than a decade at our clinic, the statistically significant risk factors for being diagnosed late (being heterosexual, migrant, and having complaints), remain fairly constant. More efforts are needed to promote testing in those risk groups.