6 giugno 2019 - 16.30 - 18.00 **Aula 211**

Oral Communications

Targetting 90-90-90

N. prog: OC 37

Title: **Time to Linkage to Care (LtC) in the ICONA COHORT: 2010-2018**

Authors: P. Piselli[1], A. Tavelli[2], C. Cimaglia[1], G. Chiaradia[1], L. Rancilio[3], M. Oldrini[4], A. Cingolani[5], M.E. Quiros Roldan[6], V. Rizzo[7], S Rusconi[8], A. Caraglia[9], A. d'Arminio Monforte[10], E. Girardi[1] for the ICONA Foundation Study Group and for the Working Group of the project "Linkage to Care in HIV: a further piece to the analysis of continuum of care in HIV in Italy"*

Affiliation: [1]INMI L. Spallanzani IRCCS, Rome, [2]Icona Foundation, Milan, [3]Caritas Ambrosiana, Milan, [4]LILA, Milan, [5]Cattolica University, Rome, [6]University of Brescia, Brescia, [7]AORN dei Colli, PO D. Cotugno, Naples, [8]ASST FBF-Sacco, University of Milan, Milan, [9]Minister of Health, Rome, [10]ASST Santi Paolo e Carlo, University of Milan, Milan

Abstract body

Background and objectives: A timely linkage to care (LtC) after HIV diagnosis may benefit individual health and may reduce onward transmission of HIV. We determined the time from HIV diagnosis to LtC among persons with HIV (PWH) entering HIV care and enrolled in the ICONA cohort in 2010-2018. We also analysed determinants for a late LtC (>28 or >60 days) in the last three years (2016-2018) of enrolment.

Methods: We analysed time to LtC (defined as the time from HIV diagnosis to first CD4 or viremia determination or cART initiation, whichever came first) among persons enrolled in the ICONA cohort in 2010-2018. Limited to the last three years of enrolment, we performed a logistic regression analysis to investigate the association between late LtC (>28 or >60 days) and individual characteristics including gender, age (by 10 years of increase), being Italian, mode of HIV-transmission, education, job situation and AIDS diagnosis within 30 days from HIV diagnosis. In a sub analysis, AIDS cases diagnosed within 30 days from HIV diagnosis were not considered.

Results: 9143 patients were considered in the analysis (81% males and 67% Italians) of whom 48% were men-who-have-sex-with- men (MSM), 38% heterosexual contacts and 6.4% intravenous drug user (IDU); 7.2% had an AIDS diagnosis within 30 days from first positive HIV-test. Overall, median days to LtC was 16 days (IQR: 4-77), and it decreased significantly from 32 days (IQR: 6-276) in 2010-2011 to 11 days in the last three years (IQR: 3-28; p<0001, Figure 1). This was particularly evident with an increasing number of CD4 at first determination. Among 2855 PWH enrolled 2016 onwards, factors significantly associated with time to LtC>28 days, were being IDU (OR=3.35 vs heterosexual) or lack of an AIDS diagnosis within 30 days from HIV diagnosis (OR=14.3) with a decreasing risk (-7%) for each 10-years of age of increase (Table 1). Similar results were observed when AIDS cases were not considered in the analysis. Finally, when considering a longer time LtC (>60 days), and excluding AIDS cases, significant determinants were: being female (OR=1.42), being IDU and be unemployed or with an occasional job (OR=1.56).

Conclusions: Among PWH entering in care in 2010-2018 progressive significant reduction in time to LtC was observed. Limiting the analysis to the last three years (2016-2018) major determinants of having a longer time to LtC were being a IDU or not having had an AIDS diagnosis. In some analysis female gender and unemployment were also associated with longer time to LtC.

[The project was partially funded by the Minister of Health (ref 4023/P.G.1).
*List of the associations involved in the project (in alphabetic order): Anlaids, Arcigay, Caritas, CICA, Circolo Mario Mieli, CNCA, Fondazione Villa Maraini, LILA, Nadir, NPS Italia, PLUS].

Figure 1. Days from to HIV-diagnosis to Linkage to Care (LtC) in the ICONA cohort according to year of enrolment: median (and interquartile range)

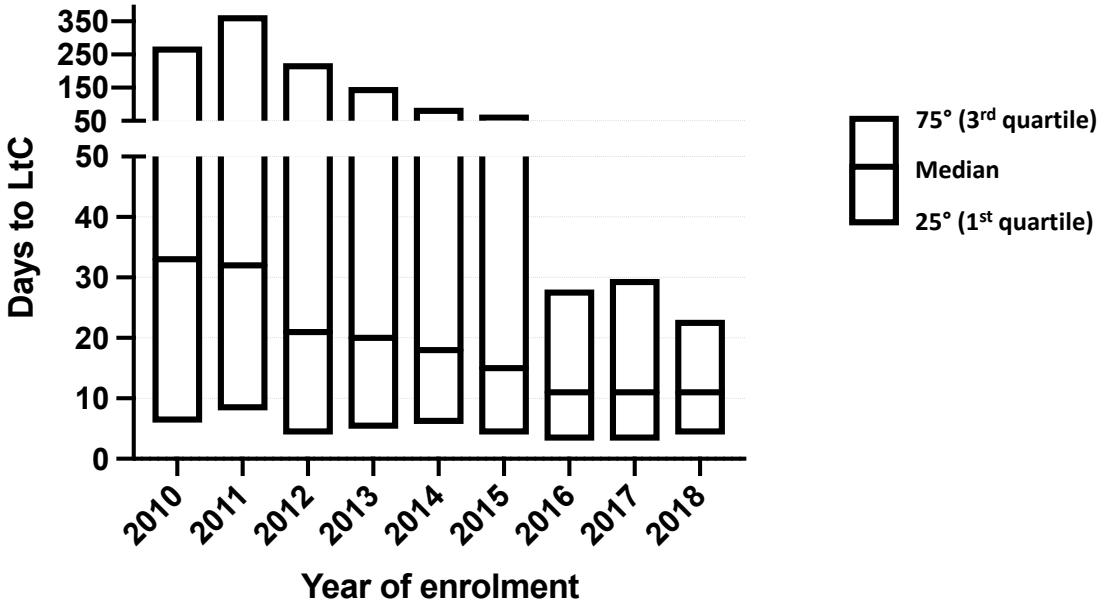

Table 1. Odds ratios (ORs) and 95% confidence intervals (CIs) for late Linkage to Care (>28 days) by selected characteristics (ICONA cohort, 2016–2018)

	N. >28 days/Tot	OR (95% CI)	p-value	MLR-OR (95% CI)‡	p-value
Gender					
M	562/2307	1		1	
F	134/548	1.00 (0.81-1.25)	0.964	1.11 (0.84-1.45)	0.466
Age, by 10 years increase		0.89 (0.83-0.96)	0.002	0.93 (0.86-1.00)	0.064
Italian					
No	391/1611	1		1	
Yes	305/1244	1.01 (0.85-1.20)	0.879	1.03 (0.86-1.24)	0.732
Mode of HIV transmission					
Heterosexual	233/1081	1		1	
MSM	356/1442	1.19 (0.99-1.44)	0.066	1.14 (0.90-1.44)	0.277
IDU	74/150	3.54 (2.49-5.04)	<0.001	3.35 (2.31-4.86)	<0.001
Other/Unknown	33/182	0.81 (0.54-1.21)	0.296	0.88 (0.58-1.33)	0.536
Educational Level					
Primary	31/106	1		1	
Lower Secondary	96/373	0.84 (0.52-1.35)	0.471	0.75 (0.45-1.25)	0.273
Upper Secondary or University	271/1114	0.78 (0.50-1.21)	0.263	0.72 (0.44-1.17)	0.189
Unknown	298/1262	0.75 (0.48-1.16)	0.194	0.66 (0.41-1.08)	0.098
Job situation					
Permanent or autonomous Job	295/1263	1		1	
Unemployed/occasional Job	132/462	1.31 (1.03-1.67)	0.027	1.16 (0.88-1.51)	0.289
Unoccupied (Retired, Student..)	41/203	0.83 (0.58-1.20)	0.321	0.84 (0.58-1.23)	0.368
Other/Unknown	228/927	1.07 (0.88-1.31)	0.502	1.11 (0.88-1.41)	0.390
AIDS diagnosis ≤30 days of HIV					
No	691/2630	1		1	
Yes	5/225	0.06 (0.03-0.16)	<0.001	0.07 (0.03-0.16)	<0.001

‡ MLR-OR: Multivariate Logistic Regression Odds Ratio, adjusted for all shown variables.