

# POST EXPOSURE PROPHYLAXIS ON SEXUAL ASSAULT VICTIMS A 10-YEAR CLINICAL EXPERIENCE ON A TERTIARY HOSPITAL.

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## INTRODUCTION

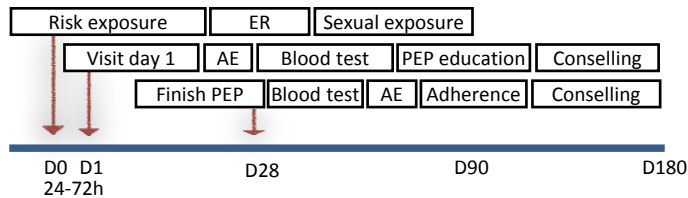
In terms of prevalence 1 out of 6 women are Sexually Assaulted (SA) and 35% of them have experienced physical or sexual violence. In Spain, at least 1000 rapes are reported annually from females in 91% of the cases.

The risk of HIV acquisition increases due to several factors, such as genital trauma, genital ulcers, sexually transmitted infection, viral load, blood, ejaculation and rape by multiple assailants.

Currently, there are no studies in Europe analyzing the rate of treatment discontinuation, PEP non-completion and its factors, adverse events and the number of sero-conversions on SA victims

## METHODS

A retrospective, longitudinal and observational study, from 2006 to 2016, at the Hospital Clinic in Barcelona



## Primary Endpoint

- PEP completion at day 28.

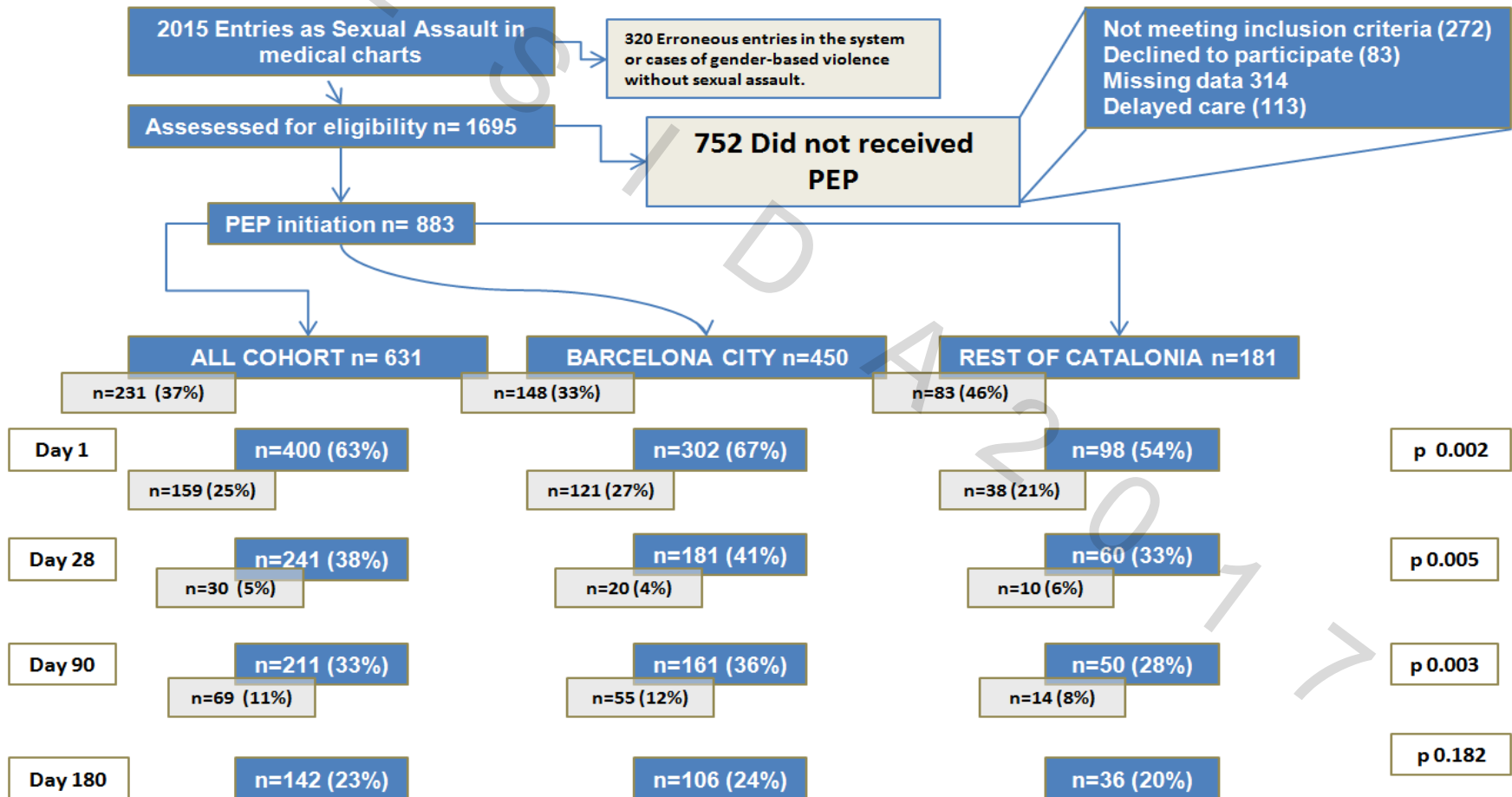
## Secondary endpoints

- lost to follow-up.
- treatment discontinuation.
- occurrence of adverse. events (AEs).
- Rate of seroconversion.

## BASELINE CHARACTERISTICS

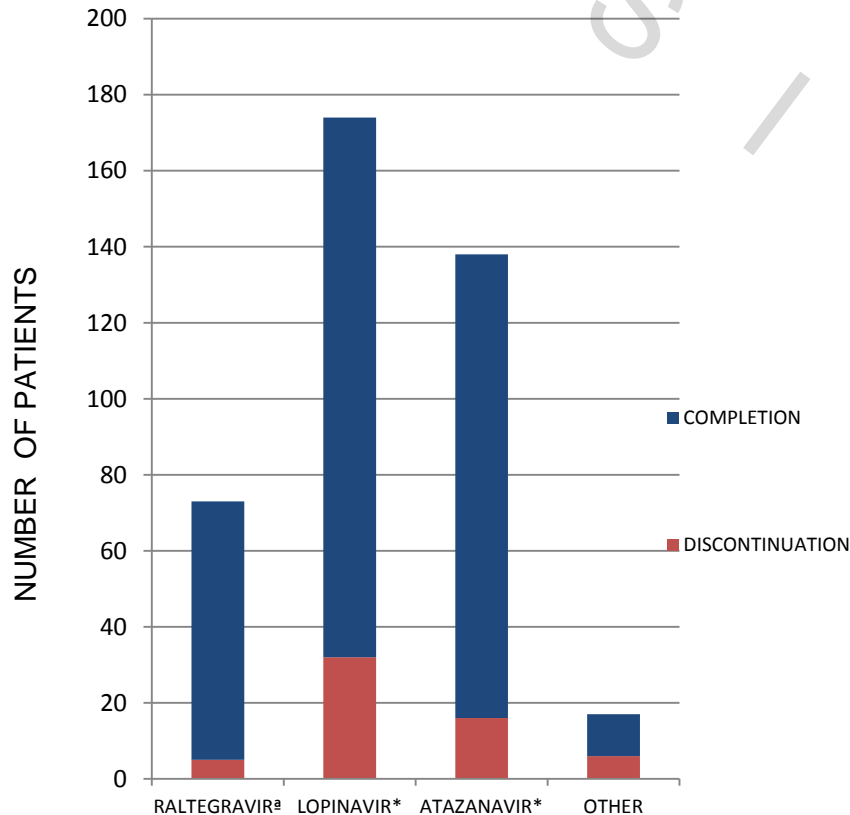
VARIABLE	COHORT	RECIVING PEP	NO RECIVING	P
N	1695	883	597	
Median Age (IQR**)	25 (21-33)	25 (21- 32)	25 (21- 33)	0.800
Women, n (%)	1583 (93)	817 (93)	559 (94)	0.524
European, n (%)	1223 (73)	597 (68)	461 (78)	<b>0.0001</b>
Catalonia residency, n (%)	1291 (76)	641 (73)	476 (80)	<b>0.003</b>
Loss consciousness, n (%)	663 (54)	470 (60)	190 (44)	<b>0.0001</b>
Antibiotic, n (%)	1027 (88)	835 (100)	188 (57)	<b>0.0001</b>
Vaccination, n (%)	613 (53)	499 (61)	112(35)	<b>0.0001</b>
Known assailant, n (%)	228 (21)	124 (17)	104(28)	<b>0.0001</b>
Appreciable Risk, n (%)	460 (47)	383 (53)	75 (29)	<b>0.0001</b>
PEP Initiation, hours (IQR)	13 (6-24)	13 (6-24)	----	---
Sex Worker, n (%)	24 (1)	18 (2)	6 (1)	0,217
Disability, n (%)	41 (2)	26 (3)	15 (4)	0.577
Previous Aggression n, (%)	126 (11)	79(10)	47 (13)	0.122
Physical trauma n, (%)	421 (36)	299 (38)	118 (33)	0.082
Multiple Perpetrators n, (%)	167 (16)	126 (19)	41 (13)	<b>0.003</b>
Substance Abuse n, (%)	92 (8)	73 (9)	19 (5)	<b>0.016</b>
Phyquiatric Disorder n, (%)	336 (29)	248 (31)	88 (25)	<b>0.019</b>
Alcohol Intake n, (%)	526 (54)	399 (58)	125 (47)	<b>0.003</b>
Alcohol blood levels (IQR**)	1.3 (0.8- 2)	1.5 (0.9-2.1)	1.1 (0.7-1.7)	<b>0.001</b>

## Study Flow chart



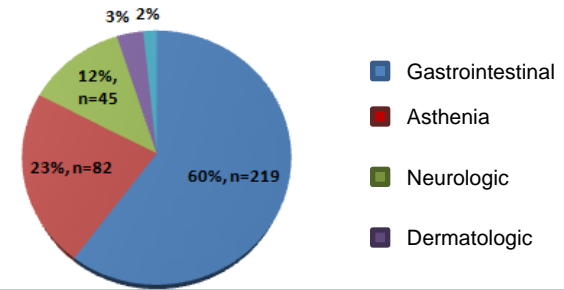
## Discontinuation and Adverse Events

DISCONTINUATION RATES OF ACCORDING TO TREATMENT ARM (n=52) FROM 385 PATIENTS COMING AT DAY 28

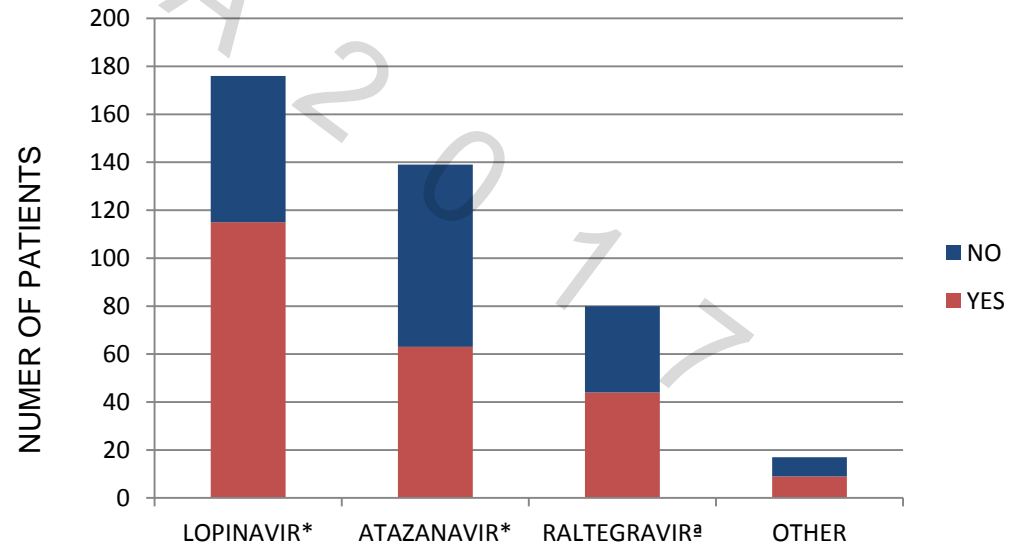


<sup>a</sup> Tenofovir/Emtricitabine as backbone\* Lamivudine/Zidovudine as backbone

PROPORTION OF PATIENTS ACCORDING TO TYPE OF ADVERSE EVENT



ADVERSE EFFECTS OF EXPOSED INDIVIDUALS FROM THE ENTIRE COHORT COMING AT LEAST TO ONE FOLLOW-UP (n=409)



<sup>a</sup> Tenofovir/Emtricitabine as backbone\* Lamivudine/Zidovudine as backbone

## CONCLUSIONS

Sexual assault victims displayed low PEP completions rates and poor follow-up rates.

Strategies to increase follow-up testing should be promoted. A nearby access to a health center facility with available resources could improve follow-up rates as well as HIV testing on these populations.

In addition, more than 50% of the patients suffered EAs, being the main reason to discontinue PEP. Drugs regimens must be reviewed in order to overcome this relevant issue.

Integrase inhibitors regimens might decrease treatment discontinuation rates and adverse events when compared with protease inhibitors.