



Prevalence of the use of sports supplements and illicit drugs for use in gyms in people included in HIV pre-exposure prophylaxis programs (Gym-PrEP cohort)

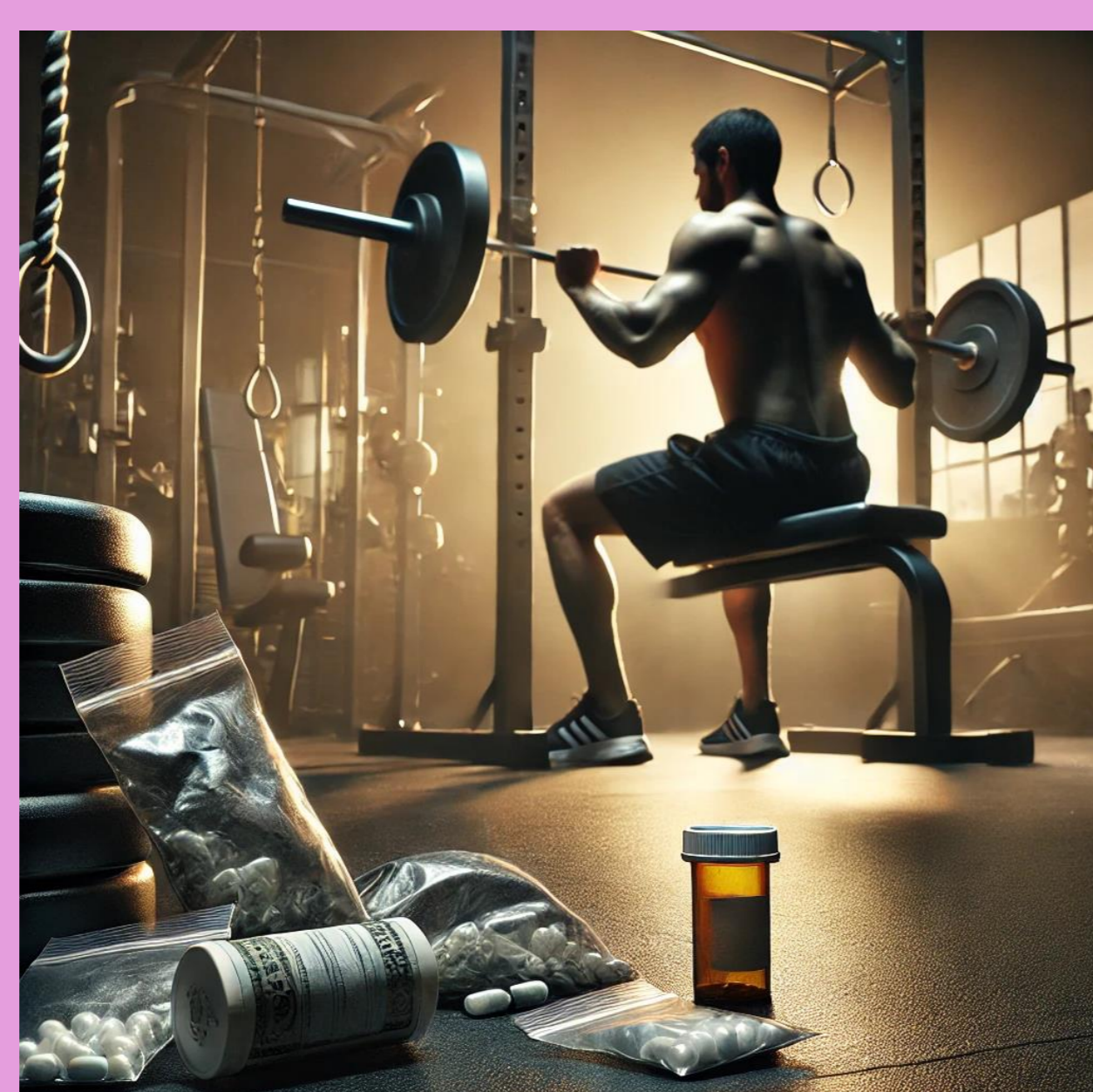
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BACKGROUND

- The use of exercise-related products in the gym is very widespread in our environment and could be increased among users of HIV pre-exposure prophylaxis (PrEP-HIV) programs, but there is very little data on this in Spain. Additionally, there is a theoretical potential for liver and kidney damage from some of these products, with little published evidence in PrEP cohorts.
- Our primary objective is to measure the **prevalence of fitness product use in patients on PrEP-HIV**.

RESULTS

- 100% were males. The median age was **34 years** (IQR 30-42).
- Median follow-up period was 16 months (IQR 12-20).
- 79% were Spanish and 17% were born in Latin America.
- 81.91% attend the gym regularly**.
 - Among those who go to the gym, 33.77% do between 1 and 4 hours per week, **59.74% do between 5 and 9 h**, and 6.49% (N=5) do between 10 and 15 h.
- 53.2% use gym products** (64% of those who attend gym regularly).
 - Of these, **8% use illicit drugs for the gym**.
 - More hours per week at the gym correlate with a higher prevalence of product use (100% in 10-15 h per week users).
- Among sports supplements, the most consumed are **protein powder** (78%), **creatine** (68%), and multivitamin complexes (38%).



CONCLUSIONS

The high prevalence of gym product use in patients on PrEP-HIV and the possible associated renal toxicity make it necessary to continue researching this population and to promote greater awareness about their use.

MATERIAL AND METHODS

- A **cross-sectional study** conducted through a **telephone survey** describes the prevalence of gym product use in **94 people on PrEP-HIV** from May 2022 to August 2023.
- Data on their baseline creatinine and liver profile, as well as at 6 months and first year, were collected from their electronic medical records. The statistical analyses were performed using the program Stata v. 12.0 (StataCorp LP, College Station, Texas, USA).

Table 1. Prevalence of Consumption of Different Legal Products Related to Gym Exercise Among PrEP Users. N=50. Decreasing Order.

N=50	N	%
Protein powder	39	78
Creatine	34	68
Multivitamins	18	36
Vitamin C	18	36
Vitamin B12	17	34
Vitamin B1	13	26
Caffeine	13	26
Beta-alanine	13	26
Branched-chain amino acids	10	20
Energy bars	7	14
Omega 3 fatty acids	7	14
Glutamine	7	14
Melatonin	6	12
L-carnitine	5	10
Magnesium	4	8
Vitamin B6	3	6
Sport drinks	3	6
Iron	3	6
Ashwagandha	3	6
Vitamin D	2	4
Essential amino acids	1	2
Vitamin E	1	2
Betaine	1	2

- Anabolic androgenic steroids** (AAS) were consumed by 8% (IM route 50%, and oral + IM routes: 50%), tamoxifen 4%, growth hormone 2%.
- We did not find use of thyroid hormone, **SARMs**, insulin or B-HCG.
- In patients who consume gym products, there has been an **increase of 0.047 mg/dl (CI 0.017-0.077) in creatinine in the first year**.