


# Changing trends in transgender demographics and morbidity: baseline data from a Spanish cohort

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## ABSTRACT

The number of transgender people who request hormone treatment is increasing worldwide. We obtained base clinical and demographic information from transgender people treated at a specialised clinic in Spain ( $n = 484$ ) and studied changes over time. Transgender women treated in 2009–14 were older than those treated in 2015–20 (29 years vs 17 years), had a lower academic level and had higher anxiolytics consumption. Transgender men treated in 2009–14 were older than those treated later (27 years vs 17 years) and had a lower academic level. These trends reflect favourable changes in how the transgender population is treated by society and health services.

**Keywords:** academic success, drug use, gender dysphoria, HIV/AIDS, LGBT, mental health, social determinants, transgender.

## Introduction

During the past decades, transgender people have disproportionately experienced violence and social exclusion, which translated into lower academic levels and a higher prevalence of various morbidities.<sup>1–4</sup>

In recent years, the number of transgender people who request hormone treatment has increased worldwide.<sup>5,6</sup> Several specialised centres have also reported a growing proportion of transgender men and a higher percentage of minors.<sup>6,7</sup>

It could be hypothesised that recent sociodemographic changes in the transgender population, and the differences in the cultural context that are usually linked with them, could also have had an influence in the trans people's profile of morbidities or academic level. Evidence regarding this topic is still scarce, even when the findings could be important from a social point of view.

## Methods

A cross-sectional study with retrospective data collection (prospective for data from January 2020 onwards) was undertaken.

The study population is made up of transgender people treated between 2009 and 2020 at the Gender Identity Unit of the Basque Country (Spain), which is the only specialised clinic in the area. The Unit only provides services to binary individuals.

Information from the medical history of every participant at the time they were first treated at the Gender Identity Unit was obtained, including age, gender, academic level (only for people >20 years), drug use (only for people >16 years), psychopharmaceuticals use, and human immunodeficiency virus (HIV) and syphilis diagnosis. Both demographic and clinical data is available for 230 individuals and there is only demographic data available for 254 individuals.

A comparison has been made between people treated from 2009 to 2014 and people treated from 2015 to 2020 (both halves of the study period).

Clinical variables from the sample have been compared with official data for the Spanish population of the same gender identity and age.<sup>8–11</sup>

The study was authorised by the Clinical Research Ethics Committee at the Cruces University Hospital.

## Results

Transgender men were 57.9% of the patients included ( $n = 280$ ) and 42.1% were transgender women ( $n = 204$ ). The median age of the transgender men was 17.5 years (minimum 4 – maximum 56); while the median age of transgender women was 20 years (minimum 5 – maximum 64).

The comparison between both study periods is detailed in Table 1.

Transgender men had a higher use of anxiolytics (9.9% vs 5.0%; chi-squared test  $P < 0.01$ ) and antidepressants (11.3% vs 0.7%;  $P < 0.01$ ) than the general Spanish male population. Transgender women were more likely to frequently consume tobacco (31.5% vs 21.3%;  $P < 0.01$ ) or alcohol (29.2% vs 23.3%;  $P = 0.03$ ) than the general Spanish female population.

## Discussion

Like other series, our study shows a progressive increase in the number of transgender people seeking specialised treatment, with a marked decrease in their average age. Gender identity is developed in the early years of life and usually becomes stable between 10 and 13 years old;<sup>12</sup> consequently, the decrease in the average age for seeking treatment could indicate that there are fewer obstacles for individuals to freely develop their identity.

The academic level of the transgender people has gone from a situation of low achievement to figures without a significant difference relative to the general population. The transgender women treated most recently in our unit also have a lower consumption of anxiolytics. This evolution reflects positive changes in treatment and integration of the collective by society and healthcare services.

The absence of clinical data for 254 participants could have negatively affected statistical strength. To confirm the findings from our work, it would be useful to separate adults' and adolescents' data in studies with a greater sample size, as well as evaluate the interdependence between some of our outcomes.

**Table 1.** Comparison of transgender characteristics between both study periods (2009–14 vs 2015–20).

Trans men	2009–14 ( $n = 55$ )	2015–20 ( $n = 225$ )	Total ( $n = 280$ )	P-value
Age	27 years	17 years	17.5 years	<b>0.001</b>
Secondary education	(5/13) 38.5%	(36/43) 83.7%	(41/56) 73.3%	<b>0.013</b>
Tobacco	(6/19) 31.6%	(29/122) 23.8%	(35/141) 24.8%	0.568
Alcohol	(5/19) 26.3%	(29/122) 23.8%	(34/141) 24.1%	0.779
Illicit drugs	(2/19) 10.5%	(8/122) 6.6%	(10/141) 7.1%	0.625
Anxiolytics	(3/19) 15.8%	(11/122) 9.0%	(14/141) 9.9%	0.404
Antidepressants	(1/19) 5.3%	(15/122) 12.3%	(16/141) 11.3%	0.697
HIV	(0/19) 0.0%	(0/122) 0.0%	(0/141) 0.0%	–
Syphilis	(0/19) 0.0%	(0/122) 0.0%	(0/141) 0.0%	–
Trans women	2009–14 ( $n = 55$ )	2015–20 ( $n = 149$ )	Total ( $n = 204$ )	P-value
Age	29 years	17 years	20 years	<b>0.001</b>
Secondary education	(4/11) 36.4%	(35/40) 87.5%	(39/51) 76.5%	<b>0.001</b>
Tobacco	(3/14) 21.4%	(25/75) 33.3%	(28/89) 31.5%	0.535
Alcohol	(3/14) 21.4%	(23/75) 30.7%	(26/89) 29.2%	0.750
Illicit drugs	(1/14) 7.1%	(6/75) 8.0%	(7/89) 7.9%	0.999
Anxiolytics	(3/14) 21.4%	(3/75) 4.0%	(6/89) 6.7%	<b>0.047</b>
Antidepressants	(3/14) 21.4%	(4/75) 5.3%	(7/89) 7.9%	0.075
HIV	(1/14) 7.1%	(2/75) 2.6%	(3/89) 3.4%	0.134
Syphilis	(0/14) 0.0%	(1/75) 1.3%	(1/89) 1.1%	0.999

Data presented as median or ( $n/N$ ) %. Bold values indicate  $P$ -values  $< 0.05$ .

Tobacco, current smoking at least weekly; alcohol, current alcohol consumption of  $> 20$  g/day; illicit drugs, current use at least weekly; HIV and syphilis, current or past diagnoses as stated in medical records.

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**Data availability.** The data that support this study will be shared upon reasonable request to the corresponding author.

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