Is adolescent use of tobacco, alcohol and cannabis decreasing?

¿Está disminuyendo el consumo de tabaco, alcohol y cannabis por los adolescentes?

Begoña Brime*, Joan R Villalbí*

* Government Delegation for the National Plan on Drugs, Ministry of Health, Spain.

Adolescence is a life stage characterized by experimentation. As part of their maturation process, adolescents develop various risk behaviours throughout this period (Kahn & Graham, 2019). Some of these may be considered healthy behaviours, serving to develop autonomy, practise decision-making, and build one’s own identity, and they are socially acceptable and constructive; others, however, are problematic. These include behaviours involving illegality or affecting personal safety, such as experimenting with substances with addictive potential. For those of us working in the field of addictions, the use of psychoactive substances by adolescents is an issue of great importance. Although isolated episodes of use should be distinguished from substance use disorders (Sultan et al., 2023), the early use of these substances is not trivial, and in addition to their short-term effects, there is a greater probability that addiction may develop (Volkow et al., 2016). Avoiding this, or at least delaying and reducing it, is therefore of great benefit for public health and forms the context for both environmental and universal prevention efforts (Becoña-Iglesias, 2021; Burkhart, 2022; United Nations Office on Drugs and Crime and the World Health Organization, 2018).

In several developed countries recently, a decrease in adolescent use of the most widespread addictive substances (notably tobacco, alcohol and cannabis), as well as other risk behaviours, has been documented (Ball et al., 2023). The records derived from representative surveys in this population show a consistent downward trend in the USA, Australia, New Zealand, England, the Netherlands, and various European Union countries participating in the ES-PAD survey (Ball et al., 2023; ESPAD Group, 2020).

A look at the situation in Spain reveals similar trends, documented in data from the ESTUDES survey, which has been carried out every two years since 1994 (Spanish Observatory on Drugs and Addictions, 2022). The still unpublished 2023 survey results have been incorporated. As can be seen in Figure 1, both tobacco and cannabis use among adolescents, on the increase at the beginning of the series, seem to be subject to a downward trend after peaking in 2004, albeit with some occasional fluctuations (perhaps more marked by the effects of the pandemic). Figure

Send correspondence to:
Email: sdgpnsd@salud.gob.es
Is adolescent use of tobacco, alcohol and cannabis decreasing?

2 shows some variables related to adolescent alcohol use (limited to the period 2008-23 since some indicators of risky drinking were not collected in the survey’s early years). It can be seen how alcohol use appears to be falling, especially those drinking patterns that raise the greatest concern (daily drinking, binge drinking, and participation in botellón-style drinking sessions in public spaces) which appear to have decreased since 2010-12. These figures do not break the data down by sex, but their distribution shows similar patterns. Other systematic sources of representative data have documented similar trends in local areas (del Pino & Astray, 2019; Santamaría-Rubio et al., 2017) or in Spain as a whole (Leal-López et al., 2019; Leal-López et al., 2020, 2021). It therefore seems that Spain may be participating in this trend. This would be very positive: a reduction in the early use of substances with addictive potential can contribute to reducing later substance use disorders (Marel et al., 2019).

The reasons behind this dynamic are the subject of international debate and controversy (Ball et al., 2023). The ESTUDES surveys show that the risk perception of heavy drinking has increased over these years, approaching the risk perception of habitual cannabis and tobacco use. They also show that the perception of ease of availability of tobacco and alcohol has not changed (despite the ban on sales to minors) and is over 85%. On the other hand, that of cannabis has decreased somewhat (from 72% in 2004 to 61% in 2021), with a much greater decrease in that of other less prevalently used substances (such as cocaine, ecstasy, amphetamines, or sedative-hypnotics) (Spanish Observatory on Drugs and Addictions, 2022). It may be that the most important factor is something highlighted by the promoters of the Icelandic program in their assessment as a key element of prevention: the decrease in leisure time with peers and without family supervision (Kristjansson et al., 2010), an aspect also suggested by other studies (Kreski et al., 2022).

The ESTUDES surveys document how substance use by adolescents steadily increases depending on how often and how long they go out at night. Some data suggests that these outings have decreased in recent years: the proportion of those who say that they go out less than once a month rose from 11% in 2008 to 18% in 2021 (Spanish Observatory on Drugs and Addictions, 2022). It is also relevant that the proportion reporting that their mothers disapprove of smoking and drinking has increased, and that the perception of consumption by their peers has decreased significantly. It should also be noted that failure at school has decreased: the number of students repeating a year in secondary school has fallen from 37% in 2008 to 21% in 2021.

Another question worth discussing is why this improvement is not widely perceived in our society. Beyond the predisposition of the media to prioritize negative over positive information, we must remember that this is a well-known phenomenon in modern societies. This reality is expertly described by Hans Rosling, who shows how citizens often ignore the progress made in the face of many major problems, and how this can lead to a fatalistic and negative attitude towards proposals for action (Rosling et al., 2018). Conversely, making progress visible reinforces the motivation to continue improving.

Figure 1
Prevalence of tobacco and cannabis use at some time in the last month and daily in secondary school students aged 14-18 in the ESTUDES survey. Spain, 1994-2023

![Graph showing prevalence of tobacco and cannabis use over time](image-url)
In this context, we believe that professionals, organizations and institutions committed to the prevention of addictions and the damage they cause must maintain efforts to understand where we are now, aware that the situation is somewhat better than years ago. To continue improving, science and data-driven prevention efforts should surely be reinforced, as detailed in the portal of good practices recently developed with support from the DGPNSD (http://www.buenaspracticasadicciones.es/) or the EMCDDA good practices portal (https://www.emcdda.europa.eu/best-practice_es). Both include prevention programs of proven value which should find wider application and achieve greater coverage. It would also be desirable that regulations aimed at reducing the availability and accessibility of addictive substances are strengthened, thus reinforcing environmental prevention. At the same time, we must maintain the surveillance and monitoring systems we have in place, and remain alert to potential emerging problems.

**Acknowledgments**

The authors wish to thank Noelia Llorens, without whose collaboration in the analysis of ESTUDES survey data this manuscript would not have been possible.

**Conflict of interests**

The authors declare no conflicts of interest.

**References**


Is adolescent use of tobacco, alcohol and cannabis decreasing?


