DEBATE



Framing substance use as "recreational" is neither accurate nor helpful for prevention purposes

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Abstract

This debate paper discusses six reasons why the term "recreational substance use" should be avoided. (1) Social norms and beliefs are drivers of behavior; therefore, the normalized use of the term conveys injunctive norms of a fully socially acceptable substance. Injunctive norms are the most important drivers of initiation into substance use. (2) The illusion of being in control, suggesting that if consumed for leisure and recreation it can easily be controlled; (3) Idealized social representations that fuel an idealized image of an alternative glamourous or mindful consumption culture; (4) <u>Downplaying potential harms</u>; (5) <u>The implicit promise of everyday</u> pleasure, the ever-growing potency of cannabis products does not fit the narrative of its use for recreation; (6) Industry as a trojan horse branding discourse of the concept of medical cannabis to normalize the image of non-medical use: to complement "therapeutic" with "recreational". "Recreational use" is a subjective ill-defined term. This debate paper aims to find a better terminological solution, honestly denominating with a neutral, unbiased, and objective connotation what is now called "recreational use". Thus, we propose using the term "non-therapeutic" use.

Keywords Recreational · Social norms · Harms · Substance use · Prevention

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Why is this important?

The present manuscript proposes a debate about the possible implications of the term "recreational use" for the prevention of substance use. It is a reflective exercise. We do not propose to exhaust the subject or present a universal truth. Our intention is to raise awareness of the possible effects of semantics on social norms and to invite commentaries.

At least part of the low real attention given to prevention seems to be self-inflicted. The industries and interest groups have been resource- and successful in dominating the narratives about human behavior and their own interests with simple and enticing slogans such as "responsible use", "individual responsibility", "informed choices". The prevention field, however, continues to look at academic questions, such as the theoretical underpinning or contents of interventions. Precisely in this regard, a position paper of the EU Commission (Mair et al., 2019) reminds us of the political nature of human beings and that narratives matter more than scientific evidence alone. On the path to the "normalization of prevention" (Sloboda et al., 2023) we need not only refined theories, infrastructures, support, training and programmes in place but also more care with the language and concepts we use, with more reflection about their unintended effects. Here we have focused on the use of the term "recreational" because it has been used by both epidemiologists and preventionists, but should be questioned because of the implicit problematic narrative it conveys. Otherwise, this questionable wording will be used in more than just technical documents or programs, but by the media and the general public, while it actually would deserve a comprehensive reflection about its use and how it qualitatively affects the general risk perception of psychoactive substances.

Alcohol use is a useful example of how much the use of a substance has been so deeply ingrained in social and cultural practices that it is implicitly and by default seen as "recreational". Hardly anyone would speak about "recreational" alcohol use: it is taken for granted that it is. And if it is not, the users are stigmatized. Because of this implicit association of alcohol being "recreational" it takes public health organizations major and hard efforts to convince people that most of their consumption practices are rather potentially harmful habits than recreational activities.

We are well aware of the standard argument that many other recreational activities, such as contact sport, horse-riding, or even angling have their risks and mortality rates that sometimes are similar to that of illicit drug use. There seems to be one important difference though: any physical activity, no matter of which kind, does have beneficial effects on mental health with a comparable effect size to that of medication or of psychotherapy, as two recent reviews are showing (Singh et al., 2023; Heissel et al., 2023). On this background, the accidents or harm caused by some (mostly contact) sports seems to be a reasonable trade-off with overall positive effects in terms of Public Health and mental health on a population level. To our knowledge, no such clear beneficial mental health effects have been documented on an important scale for the non-medical use of cannabis or alcohol. Certainly, there is emerging evidence for positive mental health benefits of ketamine, psylocibin; MDMA and others, but again: this is documented only for therapist-assisted use under controlled conditions,



but not for at libitum use at populational level. Moreover, a truly recreational activity would bring more mental or physical health benefits than harms.

The problem with the current use of "recreational" is that it suggests that - without differentiation - any non-medical use of cannabis or other psychoactive substances brings mental, emotional, social or somatic benefits, alike other recreational activities, such as sports, relaxation, sleep, sex or food. Yet, this is not correct for most consumption patterns.

This debate brings some arguments that apply to both to licit and illicit drugs. However, we know that the use of the term "recreational" is typical for illicit drugs, such as cannabis (illegal in most parts of the world), MDMA and other drugs. It is not usual to use the term "recreational use of alcohol" but is a common use for cannabis and psychedelics. We will present some arguments taking as example the role of alcohol in society, but the proposal of changing terminology applies only to the drugs that have been framed as "recreational".

The use of the term "recreational drug use"

The use of psychoactive substances has been an inherent element of human history. In some cultures, their consumption, including intoxication, is related to religion, traditions, celebrations, or fun in leisure and recreational venues. Since there is no use of drugs without risk, their consumption in most cultures has been tightly restrained by cultural or even religious norms that specify the situation, context of use, and who can consume them. Therefore, human cultures seem to have always been conscious that the pathways from initiation of substance use into problem use depend firstly on the environment (access, social norms, social networks, media, laws, and regulations), secondarily on individual characteristics (personality traits, genetics, physical, and mental health), and lastly on the characteristics of the drug itself (addictive potential, toxicodynamic, toxicokinetic, quality, quantity, and route of administration)(The European Monitoring Centre for Drugs and Drug Addiction [EMCDDA], 2019a).

In the past decades, the study of drug use in recreational environments, such as nightclubs, musical festivals, holiday resorts, and parties expanded. Consequently, and possibly by association, the use of the terms "recreational use of drugs" or "recreational drugs" increased, establishing them in the lay media and the scientific literature. Recently, the EMCDDA (2018) released the Technical Report on drug use in recreational settings, aiming to monitor and map the available studies and outcomes on measuring drug use in such contexts in European countries, presenting the advances in the comprehension of this phenomenon. Many researchers in the field used the term to define the consumption of certain substances in specific settings by a group of people who did not fall into treatment services. Since a significant proportion of drug use and hence studies have been repeatedly done in these recreational venues and contexts, drug use has somehow ended up being named "recreational", suggesting that it can be an expected option to safely enjoy leisure time.

Although there is no consensual definition of what the "recreational use of substances" would be, it is assumed that it includes use for leisure purposes and at freely chosen occasions, regardless of the frequency in which this occurs, and the quantities consumed. Some authors define recreational use as the opposite of drug abuse



(Nicholson et al., 2002), which is a potential error since numerous patterns of use do not constitute abuse or substance use disorders (SUD) but can produce harms, such as the ingestion of one or two drinks before driving or smoking a joint an hour before a mathematics test. And the perception of these are minimized when accompanied by the term "recreational". Other authors define "recreational" as the pattern that arises with a desire to enjoy the psychoactive properties of substances (Dorsen et al., 2019). However, this definition is also not precise since even patients with severe SUD may use it for a feeling of well-being, by the removal of the withdrawal symptoms or the mitigation of distress, which would place most drug use patterns in this definition of "recreational", minimizing risk perception.

Likewise, Jungaberle et al. (2018) indicate that there are several authors who over the past decades have tried to define the term "recreational use". Some of them resorted to the context of use as an indicator of the recreational pattern (Pols & Hawks, 1992). Motivation for use and quantities consumed were additional criteria for other authors. For example, according to Huxster et al. (2006), the weekly use of 80 to 150 mg of MDMA could be categorized as recreational use. This cut-off suggests that even regular weekend use can be defined as recreational. However, the term "recreational" here is suggesting that these amounts of ecstasy can be recommended as harmless, which, in addition to not being true, ends up reducing the perception of risk among current users and those who are evaluating whether or not they want to use it. We'll delve into this discussion later. For the very controlled, self-aware and introspective use (or micro-dosing) of psychoactive substances the term "recreational" could probably be accurate and it is possible that such use might be salutogenic for some (Jungaberle et al. (2018). However, these seem to be rather exceptional occurrences in the current epidemiological picture. This is the main problem with the dichotomy "medical - recreational": it suggests that any non-medical use is by default "recreational", hence deliberate, purposeful and for enjoyment. This dangerously omits the same well-known realities, which we also know from alcohol: that the majority of the related behaviors are either habits linked to social or physical triggers, or forms of self-medication to alleviate unpleasant feelings or conditions.

In the next sections we hypothesized six reasons why we believe that we should avoid using the term "recreational substance use". Table 1 summarizes the debate.

Social norms and beliefs as drivers of behavior

Social norms are the standards of acceptable and normal behavior shared by a group or community that guide human behavior (Unicef, 2021). From a social norms' perspective, which understands leisure as the use of free time for enjoyment, the concept of "recreational drug use" may suggest to the population that this kind of use is purely for fun, without or with low relevant negative side effects or loss of control.

The main problem is that "recreational" conveys a problematic injunctive norm of "it is recreational; therefore it is acceptable". Recreation is a basic human necessity and is associated with pleasure and mental well-being.

The main drivers for initiating substance use are — besides availability, motivation, and opportunity — the perceptions of injunctive norms, that is, a perception that others will find it acceptable, and of descriptive norms, a perception that everyone



Table 1 Summary of the reasons why the term "recreational substance use" should be abandoned

Reasons	Argument
Social norms and beliefs	Social norms and beliefs are among the most important drivers of human behavior and general use of terms related to drugs can have a relevant impact on them
The illusion of being in control	Leisure activities are hardly considered potentially harmful behavior
Idealized social representations	The image of counter-culture glamor might enhance social desirability
Downplaying potential harms	The perception of recreation is not associated with harm
The implicit association of everyday pleasure	The high potency of e.g., cannabis products does not fit the narrative of its use for recreation
a trojan horse for industry interests	The industry is branding a discourse of the concept of medical cannabis to nor- malize the image of non-medical use

else does it. A recent analysis of ESPAD data (Helmer et al., 2021) in multiple European countries revealed these factors as more relevant than academic performance or relationship to parents. This strong effect of normative fallacies in this study was much stronger for cannabis than for a widely used substance with high social visibility such as alcohol. The perception of "most friends doing it" increased tenfold the OR of binge drinking, but hundredfold the OR for cannabis use.

We can not guarantee that the mechanisms behind the social normativity of licit and illicit drugs are completely overlapping. However one of the most documented examples in scientific literature is the influence of social norms on alcohol consumption, especially among adolescents. Both perceived injunctive norms (the perceived approval of alcohol use) and descriptive norms (the perceived prevalence of alcohol consumption) influence adolescent alcohol use at the individual and group level (Amialchuk et al., 2019). Underage drinking is usually interpreted as a strategy of "being cool, mature and popular" (MacArthur et al., 2020). The evidence that alcohol use in adolescence is associated with the acceptability and social stimulus for its use — usually interpreted as recreational use — has been consistent in different countries, including the most diverse European and American countries (Mackinnon et al., 2017). Therefore, this imposes greater difficulty working on attitudes and normative beliefs regarding drugs and if adolescents are exposed to misleading and suggestive information about the normality and acceptability of substance use. In this context, deconstructing such normative fallacies is one of the most effective components of prevention interventions.

Mediation analysis of the effects of "Unplugged", a school-based prevention program disseminated worldwide, showed that in all countries where randomized controlled trials (RCT) were carried out, social norms and beliefs mediated the effects of the program, as proposed by its theoretical model (Vadrucci et al., 2016). In a large European Unplugged RCT that involved seven countries, the program decreased cigarette smoking, drunkenness episodes, and cannabis use via the reduction of positive beliefs and positive attitudes toward these drugs, in addition to the decrease in normative beliefs toward peers use and the increase in refusal skills (Giannotta et



al., 2014). In Brazil (Garcia-Cerde et al., 2022) and Nigeria (Vigna-Taglianti et al., 2021), the increase in alcohol negative beliefs mediated the effect on the reduction of alcohol use, that is, when alcohol risk perception and unacceptability increased, alcohol use was reduced. A study found similar results in Slovakia: when descriptive normative beliefs increased, the use of alcohol and tobacco decreased (Orosová et al., 2020). The mechanism of the effect of the "Unplugged" program in several countries suggests that both social norms (injunctive and descriptive) and risk perception, derived from the increase in negative beliefs or the reduction of positive beliefs, are key factors. A Danish study (Holm et al., 2015) also found that normative perception and glorification were both robustly associated with the incidence of cannabis use at 6- and 12-month follow-up.

There is some discussion on the effect of risk perception on the change of behaviors. Some researchers argue that falling risk perception is a consequence (rather than the cause) of more use in the Monitoring the Future Survey (Salloum, 2018): the more we use and find use acceptable, the more our risk perception decreases, according to an often-cited (Foxcroft, 2014) claim in behavioral sciences "attitude follows behavior". However, other longitudinal data (Ferrer & Kleine, 2015) and meta-analysis of experimental studies designed to determine the process of behavioral changes, support the mechanism found for Unplugged: (1) increasing risk appraisals (Sheeran et al., 2014) and (2) changing attitudes and norms (Sheeran et al., 2016) impact health behavior change.

Therefore, the use of terms with the word "recreational" might accelerate the already fading perception of risk regarding substance use and increase the perception of normality and acceptability of use. This is the first reason why we suggest letting go of the 'recreational use' dubious concept.

Subjectivity and the illusion of being in control

Since "recreational" has no clear definition, people who use drugs might subjectively presume that their consumption is "recreational" by default. The lack of perception of losing control over the amount consumed on a weekend night, i.e. drinking alcohol quite more than intended (Labhart et al., 2017) or using more drugs (Emery et al., 2020; Palamar et al., 2019) than planned, is well documented, suggesting that the perception of control is subjective and individual and may not represent the reality.

Another aspect is the underestimation of one's own alcohol consumption regarding other drinkers. A study in Australia, Canada, the UK, and the US showed that, considering AUDIT scores, one in four participants at risk of alcohol dependence and one in three participants with harmful alcohol use believed that their drinking was average or less (Garnett et al., 2015). Studies among university students show that most of the samples overestimated their peer consumption. The higher the drinking level, the higher the misperception of their own drinking (Kypri & Langley, 2003; Dumas et al., 2019), which suggests that even risky drinkers believe that they use low amounts, not identifying their problematic use. In this scenario, use may be interpreted as "recreational", since drinkers imagine that they control their use.

With all the hard experiences and the challenges in dealing with problems emerging from the perception of alcohol as an ordinary commodity, it seems like an



intentional attempt to self-sabotage prevention and treatment effort, if psychoactive substance use continues to be framed as "recreational".

Idealized social representations: glamor and "culture"

The notion of controlled "recreational" use is a self-illusion of many users, even though it might be applicable and real to some few people, who are usually well-equipped in terms of cognitive, social and economic resources and experienced in mindful consumption. Nevertheless, this fallacy of "recreational" use has been repeated multiple times and is appealing to more vulnerable population groups. In these narratives of "recreational" practices, subcultural rituals are presented with romanticized positive images, such as the Marlboro Man, one of the most iconic symbols of the glamor associated with tobacco use. The same happens in the advertisement of alcoholic beverages in several countries, where they present beautiful women as a strategy to disseminate glamor and increase sexual appeal. The identical glamor currently emerges regarding cannabis use. For instance, fancy stores with several "gourmet" options and a structure to place products similar to well-known technology stores arise in countries where non-medical cannabis use is legal.

This positive "recreational" representation follows up perfectly on those created and promoted previously by the tobacco industry and still by the alcohol industry. Moreover, the cannabis industry took this to the next level of social imagery by setting up and sponsoring myriads of female Instagram influencers who frame their cannabis use as a female health-conscious lifestyle element, hence a female cannabis analog of the Marlboro man (Spillane et al., 2021; Ayers et al., 2019; Hemsing & Greaves, 2020). Thus, the dissemination of terms like "recreational" that downplay the harms and highlight a glamorous, subcultural, gendered, and even health-conscious image are likely to annihilate those prevention efforts that only rely on warning about health risks. These narratives counteract also all effective prevention approaches that aim to deglamorize substance use and promote a humbler view of the limited human capacity for mindfulness and self-control. We recognize that particularly qualitative cannabis research has given attention to cannabis cultures (Wanke et al., 2022) and their rapidly changing societal and political contexts. Moreover, we should distinguish the useful research contributions of describing cultural practices and user identities from the advocacy use of "culture" that aims to frame potentially harmful behaviors and habits as "cultural practices", which would deserve special recognition and protection. It can however hardly be claimed that German "beer culture" has had any mitigating effect on problematic alcohol use in Germany or that Spanish wine culture would have a constraining effect against street binge drinking ("botellón"). In many cases, what people perceive with reverence as (sub-) "culture" or "tradition" is a habit of socially influential groups that disseminated generally into society. this has always been intertwined with economic interests, not only for alcohol, but also for cannabis (Pedersen, 2014), i.e. a lot of what is — sometimes carelessly — framed as "culture", "tradition", or even "counter-tradition", is neither ancient nor collective but a recent "invented tradition" (Hobsbawm & Ranger, 2012), such as e.g. Bavarian leather trousers, Scottish tartans (19th century) or coffee breaks (1940ies). Therefore,



the framing of cannabis (or alcohol) use as a "recreational" practice and labeled as "culture" tends to normalize and deregulate potentially harmful behaviors.

Downplaying potential harms

The interpretation of a drug or its consumption as "recreational" may lead to a reduced perception of the harms, dissociated from the idealized glamor. A typical example is the existence of parents who continue to offer alcohol to their children, as in some countries it is socially accepted, ignoring that age of onset is a predictor of present and future harm, including the development of dependence (Hingson et al., 2006) and even increase the overall mortality, as a large North American study (Hu et al., 2017) identified. If alcohol was not so culturally accepted (as inherently "recreational"), parents would not consider tolerating the use of their children so early, despite the evidence that parental introduction into sipping alcohol increases the harms and quantities of alcohol consumed in adolescence (Colder et al., 2018; Murphy et al., 2021; Clare et al., 2020).

In this context of normalization of alcohol use, the term "recreational" is not mentioned, as alcohol use seems to be implicitly perceived as a leisure activity, despite the marketing efforts to implicitly reinforce this perception (Nicholls, 2012). However, for club/designer drugs and cannabis, the term recreational has been strongly associated with fun and used as a potential distinction from the therapeutic use of these drugs.

We face a similar situation regarding cannabis. Currently, either due to ignorance, misinformation, or vested interests, the media uses and adopts concepts created and disseminated by pro-cannabis interest groups who subtly have embedded in the public opinion the idea that smoking a joint is harmless or even therapeutic. Thus, an argument that professionals often hear from adolescents who defend their use of cannabis is that "marijuana is medicine, therefore, it is good for your health". Yet, the evidence for harm is consolidating: occasional cannabis use can lead to structural and cognitive changes in the adolescent brain (e.g., Orr et al., 2019). This occasional use is also associated with an increased risk of behavioral disorders and psychosis, with this risk increasing the higher the frequency of use and the higher the potency of the cannabis used (Di Forti et al., 2019). Undoubtedly, scientific evidence on the risks and organic, psychological, and social consequences associated with cannabis use is increasingly robust (Rial et al., 2018; Volkow et al., 2016; World Health Organization [WHO], 2016).

The same is true, and even trickier, for all drugs, such as MDMA, ketamine, LSD, GHB, which are usually described as recreational, due to terminological confusion between what represents the occasion/place in which the consumption occurs and a supposed use pattern of these drugs. However, such drug effects are unpredictable even on the first use at a nice party, with good availability of harm reduction services (Pirona et al., 2017).

We acknowledge that the majority of users report employing risk avoidance/harm reduction strategies to balance pleasure and harm, and whilst the majority of people who use substances do not experience individual harm, they still have awareness of the potential harms. However, studies question the actual effectiveness of the respec-



tive harm avoidance strategies. In a situation where users are aware of potential harm, but are exposed to a narrative where their use is supposedly "recreational" they might be less prone to activating harm reduction techniques such as self-observation for signs of intoxication (Labhart et al., 2017; Emery et al., 2020; Palamar et al., 2019).

Additionally, from an evidence-based prevention perspective, focusing on a public discourse on the warning about harms and health risks is useless. Although accurate and balanced information on these aspects is an essential educational right, it is an – albeit very popular – illusion to believe that better knowledge about harms would – by itself – have a mitigating effect on substance use behavior, even less in young people and even lesser if the potential harms are long-term. Nevertheless, if injunctive and descriptive norms are addressed and corrected, particularly by dismantling some narratives promoted by the industry and interest groups, knowledge of the harms does add to the effectiveness of preventive efforts. In this context, the term "recreational" alludes to a narrative that substance would always be pleasurable, and it appeals to the recreational needs of young people. In line with this story-telling, prevention would be fundamentally anti-hedonistic and abstentionist and has no understanding of young people's realities.

In summary, although we know that focusing exclusively on information about harm is not a core-element of any effective prevention intervention, completely ignoring the negative effects of psychoactive substances in prevention strategies - or underestimating them - based on a potential "therapeutic" or "recreational" perspective, can reduce the perception of real harm.

The implicit promise of an everyday pleasure

Certainly, psychoactive substances provide pleasure, for receptive individuals and in conducive environments and situations. This is their *raison d'être* and nothing less should be expected from substances that hijack and override the subtle and delicate balances of our endogenous reward circuits. Subritzky (2018) and Jungaberle et al. (2018) raise an important discussion on the need to consider the use of substances on the spectrum of salutogenic models as opposed to deficit models that focus only on the harms. They point out that most of the literature fails to mention that many of the people who use one or more psychoactive substances do not become addicted in their lifetime, nor do they suffer a significant health event caused by their use. There might even be forms of dealing with psychoactive substances which have no pathological relevance or which improve the biopsychosocial health of people. Nevertheless, little research exists in this field, or is based on qualitative self-reports. Fuzzy terms used, such as "wellness" rely on subjective interpretation and can be difficult to measure, which might downplay subtle harms associated with substance use.

However, it is not necessary at all to further highlight this obvious reality to everyone by describing the use of psychoactive substances as "recreational". Highlighting this can reinforce a fallacious descriptive norm of "most people use this for recreation and joy", creating a positive expectancy. Moreover, the term recreational can somehow reinforce a traditional understanding: that there would be a distinction between the legitimate use of drugs and a non-legitimate.



The reality is that most young people, in Europe (EMCDDA, 2022) and elsewhere (Areesantichai et al., 2020), have never used cannabis and a big majority does not use it regularly. But, the THC content of non-medical cannabis in both herbal and resin forms, has steadily increased during the last 20 years, according to EMCDDA in 2022. It is difficult to understand how this commercial strategy of supply (and even less if it was demand-driven trend) of ever stronger cannabis potency aligns with a narrative of "cannabis for recreational, hence everyday purpose". Past and recent studies show that the increase is associated with the period after legalization (Sevigny et al., 2014; Hinckley & Hopfer, 2021; Tassone et al., 2023). Therefore, it appears like a contradiction to speak of "recreational use" of substances that become ever stronger (cannabis), more unpredictable (synthetic drugs), and unsuitable for everyday or frequent "recreation" anymore.

Trojan Horse: the case of the blooming cannabis industry

The strategies of the cannabis interest groups (Adams et al., 2021; Isorna & Villanueva 2022; Rotering and Apollonio, 2022) succeeded in imbibing the general public and consumers themselves with the idea that cannabis consumption is harmless and even beneficial to health, since it may suit for therapeutic purposes.

To this end, they have relied mainly on the two terms: "medical cannabis" and "recreational cannabis", suggesting that only the purposes differ. To a very large degree it is being omitted that the ingredients of cannabis for therapeutic purposes (high in CBD) are very different from those of the cannabis sold on the consumer market (high in THC). The inaccuracy of the term "medical cannabis" is probably used on purpose to create an incorrect implicit association of therapeutic use of CBD and that of street cannabis (THC). This represents a certain analogy to the alcohol industries' insistence that alcohol "per se" is unproblematic and even healthy, if only all its consumers were drinking moderately and behaving responsibly. Both "recreational" and "responsible/moderate drinking" are framing that industries or interest groups put forward with the clear purpose to establish an attractive narrative that all possible challenges and harms related to substance use can decrease by improving and fostering individual choices and responsibility.

However, scientific evidence shows that cannabis smoking, overwhelmingly the most common form of cannabis consumption (Dai & Richter, 2019), exposes users to many of the same toxins contained in tobacco smoke, including particulate matter (PM2.5), polycyclic aromatic hydrocarbons, gasses, and volatile organic compounds (Moir et al., 2008). Cannabis use is associated with more frequent chronic bronchitis episodes, airway.

In the last two decades the industry has launched a series of "rebranding" maneuvers (a set of actions involving a change of logo, name, typography, message, or a combination of the above) to change the public's perception of cannabis, which inflated the stories about a few socially and occupationally successful citizens with a serious pathology, in which traditional medicine is unable to cure or calm the pain or suffering; which only the consumption of cannabis in its various forms managed to do so. The objective has been, and continues to be, to increase the availability



and accessibility of "medical cannabis" in order to reach a greater number of "recreational" users (Adams et al., 2021).

It is worth noting that in recent years, mainly through the internet, fake news have spread proclaiming that cannabis prevents and cures all kinds of diseases (Shi et al., 2019), even taking advantage of the coronavirus pandemic (from COVID-19) to make people believe that it could prevent and cure it (Pascual et al., 2020). Young people have greater trust and use of social media for health information (Huo et al., 2019). Therefore, the overabundance of misinformation and fake news circulating on the internet about cannabis may have a pernicious effect on young people due to overexposure to pseudoscientific data (Isorna et al., 2023).

The industry has also used pro-cannabis movements and patients' associations as a "strawman" and relied on the therapeutic potential of cannabis as a "Trojan horse" to instill in the population (and mainly policy makers) the idea that "cannabis", in general, is a substance that can "cure illnesses", from multiple sclerosis to cancer, glaucoma, epilepsy, Parkinson's, menstrual pain, eating disorders, among others. This message, despite being partly accurate for CBD, has become internalized in the social imaginary of a large part of society via continuous repetition (Isorna et al., 2019). For non-experts, it seems obvious that a substance that "cures" so many illnesses cannot be harmful.

Such strategies are added to the intentional diffusion of the term "recreational use", feeding back on each other with the intention of reinforcing mistaken beliefs, always with the final objective of increasing the use and acceptance of these substances, for ideological reasons or for the increase of the potential consumer market.

We acknowledge that organizations or interest groups argue for cannabis law reform because of grounded concerns about social justice, exposure of customers to criminal organizations, and the harms of illicit markets. In the attempt to destigmatize vulnerable users, they might inadvertently promote an agenda of normalization of substance use in the sense of "it is normal and most people do". From a prevention perspective, it is important to maintain a balance between destigmatizing vulnerable people and curbing the public normalization of substance use behaviors. This is why the noble intentions of organizations that want to improve human rights do not exempt them by default from having a counterproductive role in protecting population health. It is for example contradictory that public discourse and regulations try to discourage (i.e.: de-normalize) alcohol consumption (in public spaces, when driving), while other narratives seek to "normalize" the consumption of cannabis and other substances, framing it within the need to de-stigmatize users of illicit substances. These are fully legitimate humanitarian reasons, but the ramifications of these narratives are worrying if we do not make clear positions on the differences between "stigma" (derived from non-modifiable conditions or behaviors) and the need to reduce the descriptive norms about certain behaviors.

Better terminological solutions

To distinguish the medical or therapeutic use of a psychoactive substance consumption from others with "off-label" purposes is particularly relevant in the emerging debates about cannabis legalization. For such purposes, however, describing a psy-



choactive substance for "non-therapeutic use" or "non-medical use" is more adequate. In terms of social norms framing, this is certainly not glamorizing and would clearly convey an injunctive norm and implicit message of: this kind of use is simply not for therapeutic purposes or motivations and, therefore, is neither "alternative", distinctive or "counter-cultural". Interestingly, although there is a clear and well-established therapeutic use of opioids and also potential use for pleasure, the term "recreational opioid use" is seemingly not in use, since there is an obvious and self-evident social perception of the harms of any heroin use, identified as a dangerous consumption. Moreover, for substances with possible therapeutic potential, such as psylocibin (depression), ketamine (depression) or MDMA (PTSD) such a distinction between therapeutic and non-therapeutic use would be more honest, and might help to support more research into the therapeutic potentials of these substances.

We raised here several concerns emerging from the spread on the use of the term "recreational drug" or "recreational use": change in social norms and beliefs that are drivers of behavior; subjectivity and the illusion of being in control; glamor; minimization of the existence of harms; implicit association with a joyful daily or frequent activity recreation; and therapeutic potentials as "trojan horse" strategies applied by lobbies.

Apart from medical use but also beneath the threshold for substance use disorder (SUD), there are manyfold purposes of instrumental substance use, such as self-treatment, habit, implicit associations, responding to triggers, etc. Among these, truly recreational use might be possible for a small group of people at low risk for developing problems. By framing the majority of these other purposes of substance use also as "recreational" we further fuel the self-illusion of many people with potentially harmful substance use levels that their motivations for use are merely recreational and require no behavioral change.

We aim to launch the debate about a better terminological solution, which honestly describes psychoactive substance use with a neutral, unbiased, and objective connotation. Therefore, we propose to substitute "recreational use", with "non-therapeutic" use, and we invite the scientific and professional communities to reflect on a further improved terminology.

No psychoactive substance should be considered an ordinary commodity and prevention should be based on clear and fair information and by applying a culturally sensitive realistic approach focusing on sustained healthier behavior. It seems that few people achieve less harmful consumption patterns on their own, and few societies provide the environments to do so, which increases the need for preventive strategies. Misleading terms can threaten the adequate conditions for informed decision-making. Framing whatever off-label drug use — harmful or moderate — as "recreational" disfavors an honest approach to prevention of substance use and harm reduction. In order to achieve more protective behaviors, it is helpful for people to recognize that their use is not recreational but serves in most cases other instrumental purposes.



Final note

This matters in a world where narratives matter. We need a better and more differentiated terminology for non-medical substance use and invite to an open debate on this matter. However, it is a debate paper and the discussion presented here appears to have never been evaluated through experimental studies and would benefit from evidence of its validity. In this sense, we propose studies that can test the effect of exposure to this terminology in the construction of normative beliefs in adolescents.

Declarations

Competing Interests Dr. Sanchez is the Editor-in-Chief of the Journal of Preventions. Dr. Burkhart is a member of the editorial board of the journal and president of the EUSPR – European Society for Prevention Research - the institution responsible for this journal.

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