



Increasing awareness of the severity of female victimization by opportunistic drug-facilitated sexual assault: A new viewpoint



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ABSTRACT

The victimization of women by opportunistic drug-facilitated sexual assault in leisure contexts was studied in this work by applying a novel approximation. A multifocal analytical strategy based on an intersectional gender-sensitive approach was used to analyse the evidence coming from both forensic case studies and contextual studies about sexual interrelation and drug use. The process of victimization comprises social changes affecting consumption patterns and sexual interaction, intersecting in the hegemonic recreational nightlife model. However, victims experience a range of situations that make it difficult for them to self-acknowledge themselves as such. Widespread myths about the victimization process add to the social questioning faced by victims, stemming from gender-based double standards which condition the expected female behaviors regarding the use of drugs and sexual interaction. The victims usually experience amnesia, lack of injuries and emotional harm, which make difficult the self-acknowledgement as a victim of sexual assault and the reporting of the episode suffered. Consequently, it is an urgent public health need to implement a new viewpoint about the victimization of women by opportunistic drug-facilitated sexual assault in leisure contexts, able to increase awareness of the severity of this form of sexual violence. Society must recognize the existence of this problem within itself to help victims to acknowledge themselves as such, lodge a complaint and seek adequate help. The lack of this social support feeds the perpetuation of the victimization process, which exacerbates the risk of locking victims into spirals of cyclical re-victimization and favors both the underreporting as well as inadequate coping strategies. In addition to focusing on the need to increase awareness of the severity of female victimization by opportunistic drug-facilitated sexual assault in leisure contexts, other recommendations include the use of the term "take advantage", the development of specific criminal approaches, and the in-depth knowledge of the phenomenon via victimization surveys. These steps are necessary for developing well-targeted and evidence-based preventive measures consistent-with-reality.

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Introduction

Sexual violence entails all unwanted sexual acts, attempts, comments, or insinuations and constitutes a severe global public health problem [1], mainly affecting women [1–3]. One in ten European women has suffered some form of sexual violence since the age of fifteen, and one in twenty has been raped [4]. Around 2.0 % have suffered some form of sexual violence in the last year [4], a very similar figure to that observed in Spain, where 14 % of women aged 16 or older have experienced sexual violence at some time in their lives [5]. Likewise, studies in Spain and other countries agree that young women suffer the highest rates of sexual violence [1,5–10]. Sexual violence is complex and comprises among other factors the use of psychoactive substances, whether they be legal or illegal abuse drugs, medical therapies, or other. The mediation of psychoactive substances in sexual interaction is a recurrent phenomenon throughout history [11]. However, this mediation is subject to modifications as social changes occur which affect consumption patterns and sexual interaction. In this sense, various studies observed significant changes in female consumption patterns, especially among younger women, with a decrease in the gender gap in recent decades [12–16]. From the intersection between psychoactive substance use and sexual violence it arises the phenomenon of substance-mediated sexual violence, so-called drug-facilitated sexual assault (DFSA) [17]. In the United States, 11 % of women over the age of eighteen have been raped at some time in their lives while they were incapacitated by alcohol or other drugs, and 1 % in the last year [3]. In the UK, 38 % of victims who reported having been raped at some time in their lives since the age of 16 said they were under the influence of alcohol the last time they suffered a rape [2]. Victimization by DFSA is differentiated into opportunistic or proactive, depending on the *modus operandi* used by the assailant [18]. In opportunistic assaults, the assailant takes advantage of a state of incapacity resulting from the voluntary use of substances by the victim. In turn, in proactive assaults, the victim's state of incapacity results from involuntary consumption because of the assailant having administered a substance to the victim in a covert or forced way [18]. Case studies in multiple countries observed that victimization by DFSA especially affects young women, mostly through opportunistic assaults following voluntary alcohol consumption [19–24]. Youth leisure has been observed as the main context of victimization by DFSA [23,25–28], although several authors recommend further study [25,29–33]. According to the hunting model, sexual

opportunism fits the characteristic behavior of sexual assailants, who select their victims based on their level of vulnerability or their ability to resist an assault [34–36]. The concern of the international community for the DFSA phenomenon is noted in initiatives by its criminal prosecution. The International Classification of Crime for Statistical Purposes includes drug-facilitated rape in the injury acts of a sexual nature [37], and official guidelines have been published for the forensic analysis of drugs facilitating sexual assault [38]. Moreover, current global challenges documented in the 2030 Agenda for Sustainable Development include the elimination of sexual violence against women [39]. The identification and recognition of all forms of sexual violence is a current demand for the achievement of this challenge [40]. The lack of recognition of a specific form of violence hinders its solution and favours its perpetuation. In this sense, the 2030 Agenda precisely coins the motto "no one will be left behind". However, regarding the DFSA phenomenon, there is a deficit in the study and understanding of opportunism, despite it being the main type of victimization. This situation probably results from a focus of attention being deviated from the predominant reality. In this sense, many studies alert about the existence of an alarmist media coverage around the proactive variant of DFSA, which are turning attention away from opportunism [19–22,41,42]. Therefore, an adequate study and recognition of victimization by opportunistic DFSA and the difficulties faced by victims is an urgent need. For this purpose, the Spanish environment is a useful framework, where the hegemonic recreational nightlife model prevails [43], combining a pattern of leisure based on the culture of self-intoxication and a model of immediate sexuality [44]. The analysis can help to better understand a problem resulting from the intersection of global influencing factors, such as the use of psychoactive substances and sexual violence, obtaining conclusions transferable to other communities sharing the same recreational model. This study aims to deepen the understanding of the victimization by opportunistic DFSA, how it originates, and how it perpetuates inside the society. In order to encourage the implementation of a new viewpoint in light of the phenomenon, able to increase awareness of the severity of female victimization by this form of sexual violence.

Material and methods

A multifocal analytical strategy was implemented to achieve an in-depth study of victimization by opportunistic DFSA. For

this, an intersectional gender-sensitive approach was applied to the analysis of the intersecting dimensions within the phenomenon. The multi-causality of violent phenomena usually results in research framed into separate fields of knowledge. However, this fragmentation hinders a more unobstructed view of the intersectional nature of the problem. To avoid this limitation and achieve a comprehensive approach, the implemented analytical strategy applied various approaches recommended by international authorities for the study of violence. Firstly, intersectionality is required for the study of population groups in which multiple vulnerability factors intersect, according to the global challenge of "no one will be left behind" pursued by the Agenda 2030 [39]. Likewise, the active integration of a gender-based perspective, promoted by the Beijing Declaration and Platform for Action in order to develop knowledge and understand the causes, consequences, and mechanisms of violence against women [45]. The generation of proper knowledge that enables us to deal with inequalities, discrimination, and unfair power relations is a recognized need worldwide [46–48].

Initially, the Spanish environment was used as a framework for the contextualization of the study. Information about the Spanish experience related to the DFSA phenomenon was collected through a comprehensive search on three different types of knowledge platforms and scientific databases. First, a search was performed on Scopus and Web of Science. Then, in the national scientific databases "*Información y Documentación de la Ciencia en España*" (ÍnDICEs-CSIC) [49], the platform "*Recolector de Ciencia Abierta*" (RECOLECTA) [50], and "*Índice Bibliográfico Español en Ciencias de la Salud*" (IBECS) [51]. Several Spanish and English keywords were used as search terms: drug-facilitated sexual assault, chemical submission, chemical vulnerability, crimes against sexual freedom, sexual violence and drugs, sexual violence and alcohol, sexual assault and drugs, alcohol and sexuality, drugs and sexuality, *burundanga*, and escopolamine. This particular drug has attracted much attention by the Spanish mass media causing misconceptions about the phenomena. Thirdly, the online repositories of the Government Delegation for the National Plan on Drugs (GDNP) of the Ministry of Health [52], and the Government Delegation against Gender Violence (GDGV) of the Ministry of Equality were also reviewed [53].

Regarding the selection criteria, to get a comprehensive insight over time, there were no limitations on the publication date range for the literature search. Included document types encompassed original research articles, reviews, notes, and letters. The search was refined by country and limited to Spain. After this initial search, the reference lists were also reviewed to identify additional relevant literature. As such, this review focuses on various types of studies, including those about the casuistry of the DFSA phenomenon, studies about risk factors to the sexual victimization of adolescents and young people, as well as studies concerning the recreational habits of these population groups, especially, the dynamics of drug use, sexual interrelation, and the combination of both spheres. Likewise, various authors have pointed out the similarity between the DFSA phenomenon in Spain and the situation from other neighbouring countries [23,54]. Working in this line, to generate conclusions transferable to other communities sharing the same recreational model, the analysis of the Spanish reality was complemented by examining similar studies from other countries. These other revised works also encompassed case studies, as well as researches about sexual victimization within recreational contexts combining drug use and sexual interrelation. Fig. 1 illustrates the multifocal analytical strategy applied.

Results and discussion

Several critical aspects of victimization by opportunistic DFSA were addressed. Firstly, the main profile and context of victimization were approached for properly focussing the study. Then, the original shaping frame was analyzed, studying the dynamics of the consumption of substances, sexual interaction, and substance-mediated sexual interaction. This was followed by an analysis of the difficulties experienced by the victims of opportunistic DFSA for their self-acknowledgement as such. Subsequently, the mechanism for the perpetuation of this type of sexual violence was studied, together with the observation of how this violence may also affect other vulnerable profiles.

This study encompassed an in-depth review of one hundred and fifty-one publications, which involved sixty-eight studies realized in Spain and eighty-three articles from other countries. Special attention was paid to forensic studies focussed on the research of the casuistry of DFSA, which included studies of alleged sexual assaults reported to the judicial authorities [23,24,41,55–66], and studies on alleged DFSA cases attended at sexual assault treatment centers [20,21,28,42,67–75]. The remaining reviewed studies focussed on the risk factors to the sexual victimization of adolescents and young people, especially concerning their recreational habits in leisure nightlife contexts, such as the dynamics of drug use and sexual behaviors. As described along the following sections, the vast majority of these studies used youth students from secondary-school education and colleges as study samples.

1. Initial approach to the victimization by DFSA

The evidence-based study of the DFSA phenomenon is mainly framed in forensic casuistry in Spain. There are several retrospective reviews of alleged cases reported to the national Administration of Justice, including three studies of time intervals [23,55,56] and two specific case studies [57,58]. Other works reviewed alleged cases attended in hospital emergency services, including a prospective review [28] and five specific case studies [67–71]. Regarding judicially confirmed cases, another study reviewed the convictions for this crime between 1999 and 2016 [59]. The main profile, context, and spatiotemporal location of victimization by DFSA are structured and described below.

1.1. Profile of victimization by DFSA: gender and age

The vast majority of victims were women, with percentages of 91 % [28], 97 % [55,56], and up to 100 % [23] in the reviews of time intervals. The studies on specific cases add up to eleven victims, including four men in three studies [57,69,70]. Women were 96 % of the judicially confirmed victims [59]. Other studies in forensic institutes and victim care centers from several countries also observed the oversized female victimization [19], with values between 92 % and 100 % [20,60–62,65,73,75]. Others directly analyzed women samples [21,24,63,74,76]. Regarding the age, victims in Spanish studies had average ages between 23 and 27 years old [23,28,56], as well as in the studies from other countries [21,24,60–62,64,65,72,73,77]. All alleged assailants were men in various national and foreign studies [23,65,67,68,71]. Male assailants reached 99 % in judicial convictions [59].

1.2. Context and spatiotemporal location

Many studies point to the generation of risk for sexual victimization in contexts related to alcohol consumption, because of an increased likelihood of contact between intoxicated women and potential assailants in the absence of capable guardians [26,27,78,79]. The prevalence of leisure settings reached 91 % [28]

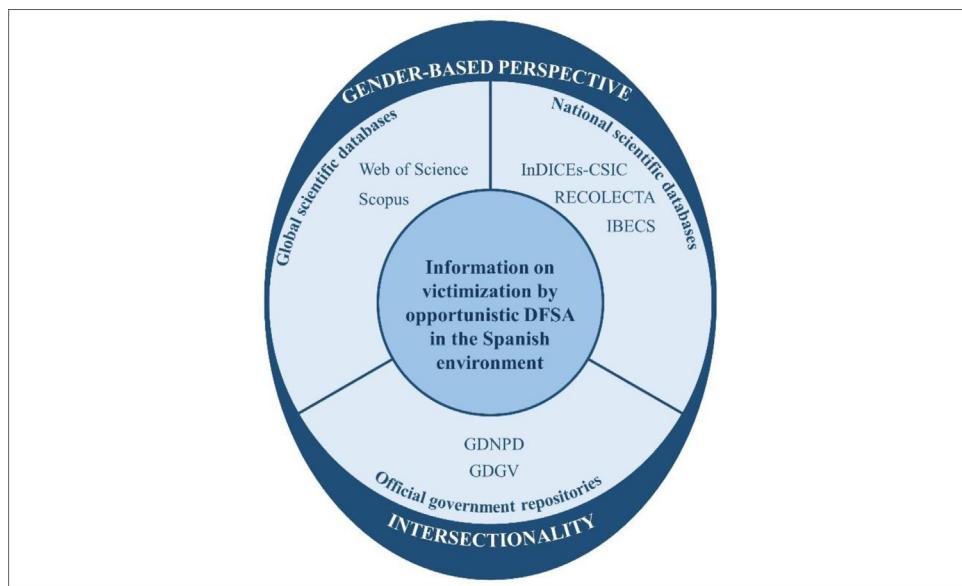


Fig. 1. Multifocal analytical strategy focussing the study of victimization by opportunistic DFSA in the Spanish environment. The comprehensive search was based both on national and global databases, as well as official government repositories.

and 42 % [23] in Spanish studies of alleged DFSA cases. Specific national case studies also observed this relationship [67,69,71], as well as studies in other countries [41,76,80]. Regarding the time of year, a higher incidence was observed in the summer months [23,24] and in December [56,72], which was associated with a higher probability of socialization in festive seasons. In this line, several studies observed that approximately half of the assaults happened on weekends [28,42,56]. Moreover, the vast majority of attacks occurred at night or early morning [21,28,60]. On the other hand, some studies in highly visited cities observed the particular victimization of tourists, which related to a greater vulnerability of tourists in nightlife contexts. Thus, 73 % of victims were foreigners in Florence [74] and 66 % in Barcelona, where 23 % were tourists [28]. In addition, recent studies in Spain indicated male victimization by DFSA in recreational contexts linked to "chemsex" or the use of drugs to facilitate sexual encounters between men [57,70]. Concerning convictions, 63 % happened on weekends and 65 % at night or early morning [59].

2. Shaping the original frame of victimization by DFSA

After considering the main profile and context of victimization by DFSA, the analytical intersectional approach was applied to the study of the phenomenon. In light of this intersectional focus, Fig. 2 schematizes in an orderly and easily viewable way the original shaping frame of sexual interaction mediated by psychoactive substances in the hegemonic recreational nightlife model. As such, according to most of the known cases, leisure nightlife is the contextual framework wherein the victimization process usually happens. The context shaped by the current model of leisure is the framework where sexual interaction and the use of drugs are combined, resulting in the generation of a sexual interaction mediated by substances, both legal and illegal. The scheme shown in Fig. 2 provides valuable guidance to structure the intersectional nature of this study along the following sections. Each of the four geometric intersecting shapes represents various key factors contributing to the process of the victimization by opportunistic DFSA in leisure contexts.

2.1. Contextual framework: the hegemonic recreational nightlife model

The prevalent youth leisure model in Spain shares the paradigm common to other European countries: the dynamic known as the hegemonic recreational nightlife model [43] or "going out", which combines the use of psychoactive substances with entertainment [81]. A "culture of self-intoxication" was observed in Spain [44], resulting from the consolidation of drinking patterns of large amounts of alcohol in a short time or "binge drinking" [82–84], realized in consumer-oriented meetings commonly known as "botellón" [43]. A Spanish study with young people aged between 18 and 24 observed that 60 % of the individuals regularly consumed alcohol in high doses, and more than half got drunk during their leisure outings [85]. Around 23 % of students between 14 and 18 practiced "botellón" during the last month, and 60 % of them got drunk in that period [86]. On the other hand, in addition to substance abuse, youth socialization in a leisure context is also closely related to sexual experimentation [43,87]. For around 30 % looking for sex it is an important motivation to participate in this recreational model, where young people join with the expectation of a sexual encounter. Thus, 25 % of the students between 14 and 18 who participated in some "botellón" during the last month did so because it helps them to flirt [86]. Sexual experimentation in this paradigm of leisure is characterized by the interrelation with multiple partners [88], in coherence with a "model of instantaneous sexuality" focused on the immediate satisfaction of pleasure through sexual interactions without emotional ties [87]. These patterns promote sexuality as one more consumption object, similar to what occurs with the use of psychoactive substances. This sexual dynamic is substantially more aligned to male than female expectations for sexual encounters. The association between sex and emotional bond to deepen a relationship predominates among women, while the satisfaction of pleasure prevails as the expectation for sexual encounters between men [89–93]. Involvement in this leisure model increases the likelihood of sexual encounters under the influence of psychoactive substances [94]. One study observed that 21 % of men acknowledged having competed on some occasion to see who had more sexual relationships in one night, compared to 4 % of women [95].

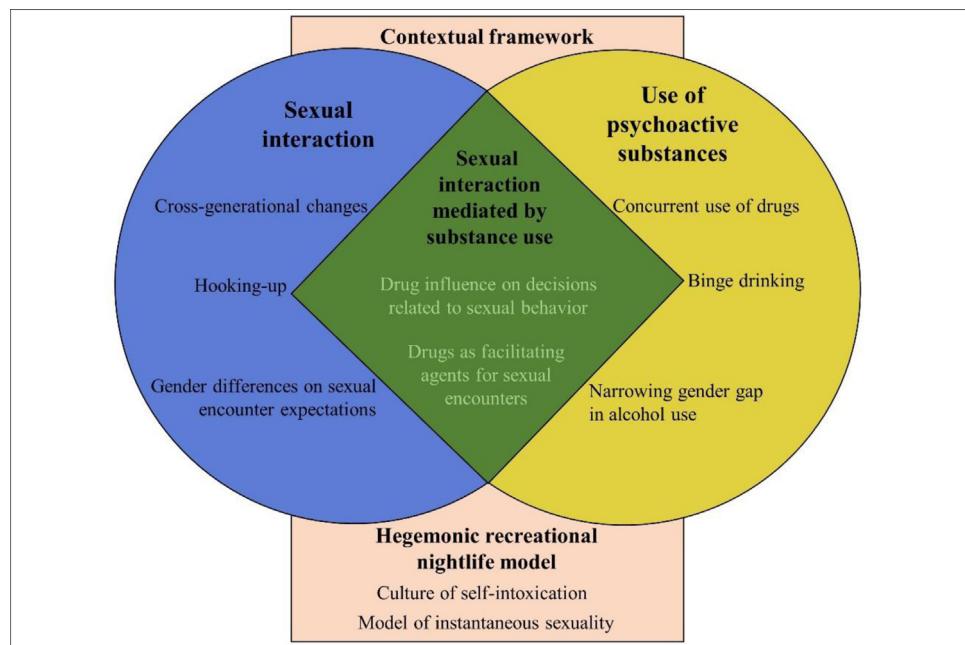


Fig. 2. The original shaping frame of sexual interaction mediated by substance use in the hegemonic recreational nightlife model.

At the same time, during the last decades, women have been integrated into this leisure model and joined the "culture of self-intoxication" [44]. In this sense, between students from 14 to 18 years old, women engage more in "*botellón*" than men [86]. Another study observed that 88 % of women aged 18–29 stated they go out to consume alcohol, 10 % admitted drinking a lot, 66 % the average amount, and only 23 % said they do not drink [96].

2.2. Use of psychoactive substances

The vulnerability resulting from the effects of psychoactive substances voluntarily used is one of the defining factors of victimization by opportunistic DFSA. Down below, several dynamics of consumption were reviewed, focussing on young women as the main profile of victimization identified in leisure contexts.

i. Alcohol risk consumption among young people and gender differences. Around the world, indicators of psychoactive substance use are especially high in young people, peaking between 18 and 25 years of age [97]. The population aged 15–24 has the highest prevalence of excessive alcohol consumption [15]. In Spain, 36 % of people in that age range got drunk in the last year and 15 % in the last month [98]. For both time frames, the prevalence of binge drinking increased by more than 2% among students between 14 and 18 years of age. In this group, 24 % got drunk in the last month, and binge drinking reached 43 % among those who consumed alcohol in that period [86]. On the other hand, in many western countries, the gender gap in the use of psychoactive substances has significantly narrowed during the last years in younger generations, even disappearing among adolescents [12,16]. This variation has been observed mainly for alcohol, both globally [13,14] and in Europe [15]. An explanation for this decrease in the gender gap are the changes in environmental and socio-cultural factors influencing women and their accessibility to the use of psychoactive substances [12,15,16,99]. In Spain, among students aged from 14 to 18, alcohol consumption during the last month and the last year was higher in women [86]. The gender gap in the prevalence of alcohol use decreased since 17 % among the population with ages between 15 and 64, to 9 % between 15 and 24 [98]. In this way, similar results were observed

by other studies with young students [100,101]. Recent official studies with students from 14 to 18 showed a significant increase in the prevalence of binge drinking in the last month, which was higher among women than men [86]. The prevalence of drunkenness during the lifetime, the last month and the last year, was also higher for women, with more top differences between genders at 14 and 15 [86]. Another study in students aged 12–19 also found that girls got drunk more in the past year [102]. Over the past decade, the prevalence of binge drinking has especially increased among women aged 15–35. In the subgroup from 15 to 24 in 2017, binge drinking in the last month reached 18 % in men and 12 % in women. These values double, in the case of men, and triple, in the case of women, the observed data for the population as a whole [98].

ii. Use of sedative-hypnotic therapeutic drugs. As with alcohol, sedative-hypnotic drugs of medical use are legal substances, so they present greater accessibility [86], an essential factor related to their higher consumption by women [12,16]. In this sense, at a global level, the use of prescription or over-the-counter sedative-hypnotic drugs is especially widespread among women [103]. This observation also occurs in Spain, where the prevalence increases with age, standing at 8 % among women from 15 to 34, and rising to 9 % from 25 to 34 [98]. In turn, there is an upward trend in the use of sedative-hypnotics among women students from 14 to 18. Around 21 % have consumed them on some occasion with or without a prescription, while 10 % have done so without a prescription [86]. Moreover, at 18 years of age, the ever use of sedative-hypnotics with or without prescription increases to 32 %, and 15 % for sedative-hypnotics without prescription [86].

iii. Concurrent use of drugs. The concurrent use of more than one psychoactive substance is an important feature of drug use [97], a pattern especially widespread among those who practice binge drinking and get drunk more frequently [86,98]. In Spain, 32 % of female students aged from 14 to 18, and 44 % of those aged 18, used different drugs concurrently in the last month [86]. On the other hand, sedative-hypnotics, especially without prescription, are often combined with other substances [98]. The prevalence of concurrent consumption of drugs among those who use sedatives

without a prescription reaches 93 % [98]. Around 24 % of women who consumed sedative-hypnotics without a prescription in the last year combined them with alcohol or other drugs [98]. Another study with students from 12 to 19 found that the combination of medications with alcohol was higher among women than men [102].

2.3. Sexual interaction

As shown in Fig. 2, after drug use, sexual interaction is the second dimension intersecting within the contextual framework shaped by the current model of leisure. The following sections study some essential social changes that affected sexual interaction over the last years, the different expectations from sexual encounters based on gender, and the effects of drugs on decisions related to sexual behavior.

i. Cross-generational changes related to sexuality. Sexual interaction of Spanish youth experienced important changes over the last decades [87,95,104], with the duplication of young people from 15 to 17 with sexual experience [87], the trend to have a higher number of sexual partners [105], and a decrease of the age of sexual debut [101,104,106–113]. The “model of instant sexuality” is defined in this context, based on specific sexual encounters, without emotional ties, and looking for immediately satisfying pleasure [87]. This sexual dynamic fits the pattern known as “hooking up”, consisting of sexual encounters between people who are strangers or casual friends and engage in sexual behaviors with no commitment to a future relationship [114]. Several studies pointed hooking up as a frequent behavior between young people [115,116]. These encounters can be spontaneous, or someone may plan to hook up with another person without previously knowing the sexual partner [116,117]. On the other hand, social changes in sexual patterns involve both men and women, so there is a trend towards similar behaviors and consequently narrowing the gender gap related to sexual interaction [118]. Women are approaching the stereotype of male sexual behavior [95]. Lower age of sexual debut and a higher number of sexual partners is being observed among younger female cohorts [104].

ii. Gender differences in sexual encounter expectations. Expectations before a potential sexual encounter differ significantly between women and men. Among women the association of sex with love predominates, as well as emotional bonds based on trust and fidelity focussed on deepening a couple relationship, while among men desire, physical attraction, and satisfaction of pleasure prevail [89]. Several studies with university students from different countries also observed a greater male tendency towards casual sex [119], hooking up [114,115], and sexual goals as the primary motivation for dating [119,120]. Similarly, it was also noted the highest female prevalence of companionship, intimacy, and having fun as relationship goals for dating [119,120]. Women expressed less comfort than men with hooking up [115]. Moreover, this type of encounter was especially associated with feelings of sexual regret, shame, and depression in women [114,116].

ii. Drugs influence on decisions related to sexual behaviour. Intoxication by psychoactive substances causes brain disorders similar to cognitive deterioration by chronic abuse or injuries at the frontal lobe [121]. Drug-related disorders increase vulnerability to potential assaults by disturbing the decision-making process [122,123], hindering the perception of potentially risky situations, and growing euphoria, disinhibition, and lowering self-control. Therefore, it enhances the probability of engaging

later regretted intercourse, as well as the inability to repel unwanted sexual advances, increasing the risk for sexual assault.

2.4. Sexual interaction mediated by substance use

Sexual interaction mediated by drugs emerges as an intersectional phenomenon within the contextual framework shaped by the current youth leisure model, from the combination of sexual interaction and substance use (Fig. 2). The following sections analyse the prevalence of sexual intercourse under the effects of psychoactive substances among young people, perceptions about drugs as facilitating agents for sexual encounters, and the opportunistic sexual interaction mediated by drugs.

i. Sexual intercourse under the effects of psychoactive substances. Several studies analyzed the prevalence of sexual intercourse under the effects of substances among Spanish young people. In a sample of students from 14 to 18, 52 % reported sexual intercourse under the influence of drugs, 48 % of whom were under the influence of alcohol [124]. Another study with university students observed that lifetime prevalence of sexual intercourse under the influence of drugs increased from 0.4 % to 20 % between 1999 and 2008 [100]. Similar studies detected a lifetime prevalence from 50 % to 60 % concerning having had sexual intercourse under alcohol effects [125]. The highest known value reached 77 % in a sample of people from 14 to 25 who frequented recreational nightlife and consumed alcohol or other drugs [94]. The lifetime prevalence of sexual intercourse under the effects of drugs other than alcohol reached 18 % in another study with college students [125]. Meanwhile, another study reported 16 % of sexual intercourse under the effects of cannabis and 7 % under other substances, mainly cocaine [126]. In turn, among students from 14 to 18, the lifetime prevalence of sexual intercourse under the effects of cannabis and cocaine reached 23 % and 1 %, respectively [124]. The lifetime prevalence of sexual intercourse under cocaine effects reached 55 % between people from 14 to 25 who frequented recreational nightlife and consumed alcohol or other drugs [94]. Concerning last-year prevalence, values around 6 % were found among students from 12 to 19 [89,102]. On the other hand, another study observed that 9 % of students within a sample aged from 12 to 17 had used drugs just before their first sexual intercourse. Alcohol consumption at that time increased to 12 % among college students. Another recent study observed that 14 % of students from 14 to 20 had used drugs during their last intercourse [118]. Furthermore, concerning regretted sexual intercourse, a study observed that 4 % of those who undertook binge drinking during the last month had sex on some occasion due to the use of drugs that they otherwise would not have had [98]. The regret due to sexual intercourse under alcohol effects increased by up to 11 % within a national sample of women from 18 to 29 [96]. At the same time, for studies framed in a nightlife context, 4 % of a sample of students from 13 to 19 reported that they usually regret their sexual interrelations the day after a party night [95]. In the same context, the regret for intercourse under drug influence was 8 % for young people among 15–35 in Portugal [122]. At European level, regret reached 15 % among those who got drunk in the last month. In this study, regret in the last year reached 26 % among cocaine users during the previous month, 21 % among cannabis users, and 32 % among ecstasy users. [123]. In Spain, within a sample of young people from 14 to 25 who frequent nightlife leisure, 18 % regretted relationships under alcohol effects during the last year [94]. In turn, in another Spanish study, 12 % of cocaine users during the last month from 15 to 34 regretted intercourse [98].

ii. *Perceptions about drugs as facilitating agents for sexual encounters.* Among young people, a strategic view of drug use for sexual interaction prevails [123]. They regard psychoactive substances as facilitating agents for sexual encounters [127]. Alcohol predominates as the best perceived substance to gain confidence and facilitate interaction with potential sexual partners [87,127]. According to a recent study, 81 % of women thought that alcohol removes barriers to having sex [96]. Around 28 % of students from 14 to 18 who got drunk in the last month, did so because it helps them to flirt [86]. On the other hand, psychostimulants, such as cocaine, are positively valued for engaging in risky sexual experiences and prolonging the sexual relationship [87,127]. However, in the sexual sphere, the facilitating effects of psychoactive substances on third parties are also valued. Men perceive female alcohol consumption as a sign of sexual availability in women, identifying alcohol acceptance as a suggestion of promiscuity or predisposition to sexual interaction [128]. In this way, the use of alcohol becomes a strategy to reduce feminine resistance, and female drunkenness or intoxication is viewed as an advantage to achieve the sexual activity [87]. Men further justify alcohol use to force non-consensual sex [128]. Likewise, the predisposition to the intentional use of substances to facilitate sexual assaults increases significantly among both young men and women when they are under alcohol effects [129].

iii. *Opportunistic sexual interaction mediated by psychoactive substances.* Opportunism is the behavior whereby every situation is used to try to get advantage [130,131]. In this sense, attitudes considering drugs as facilitating agents for sexual interaction show consumption as a trigger factor for opportunities to achieve sexual encounters (Fig. 2). With this in mind, various strategies can increase the probability of sexual interaction, including those taking advantage of incapacitation derived from voluntary use of drugs. In this sense, looking for people experiencing disabling effects could be an option for a potential assailant, as well as the strategies based on inviting to voluntary consumption. These opportunistic approaches overlap with the behaviors observed among sexual offenders and match with hunting models, under which assailants select victims based on their level of vulnerability or their ability to resist an assault [34,35,36,132]. Exploiting the victim's inability to resist is the coercive strategy that sex offenders acknowledge to use most frequently [133]. Regarding opportunistic strategies based on encouraging voluntary consumption, those involve an intentional effort to weaken the victim's ability to resist eventual sexual interactions, meaning actually a coercing consumption to facilitate relationships without consent [128]. This intentionality points to the existence of a sort of premeditated opportunism. In Spain, many male teenagers acknowledge using in recreational contexts the strategy based on encouraging alcohol use to make contacts facilitating sexual encounters. Likewise, they usually think that the best way to flirt is to look for those who are under the influence of alcohol or other drugs [87]. Within a sample of university students from 17 to 25, 28 % of men acknowledged having tried to give alcohol to a woman to go further with her in the sexual sphere, and 3 % had sex with a woman using this strategy [128]. According to a similar study, 9 % of men acknowledged having used psychoactive substances to achieve sexual contacts [134]. However, the frequency of this strategy is higher, according to female perception. The percentage of women who acknowledged that a man had tried to give them alcohol to go further with them reached 44 %, while 1 % admitted having had intercourse after that [128]. Another study with young people from 18 to 27 in several European countries observed that 17 % of Spanish women reported having suffered sexual victimization by taking advantage of their inability to resist [133].

3. Difficulties in self-acknowledgement as a victim of opportunistic DFSA

In parallel to the intersectional nature of the victimization by opportunistic DFSA (Fig. 2), attention must be paid to the difficulties faced by victims after suffering this type of sexual assault. In this sense, it is striking that women who suffer episodes of victimization by opportunistic DFSA experience a range of situations that make it difficult for them to self-acknowledge as victims of sexual violence, which influences their decisions about inability to communicate the violent episode suffered, not to report, and not to seek adequate help [135,136]. As such, the lack of complaints characterizes sexual crimes [59,137,138]. Multiple studies in several countries observed the high *black figure* affecting sexual violence, which is the difference between the real number of cases that happened, and those actually reported to the authorities [6,7,9,139–144]. In Spain, sexual assaults are the crimes with the lowest reporting rate, reaching only 30 % of victims [145]. The absence of complaints from women victims of sexual, physical or psychological violence reaches 65 % [5]. According to age, the distribution of complaints takes an inverted U shape, reaching a maximum of 37 % among female victims from 45 to 54, and only 17 % of younger women, from 16 to 24 [5]. Regarding victimization by DFSA, several studies in different countries have also drawn attention to the high lack of complaints [135,146,147]. In this sense, various factors affect the capacity of victims to self-acknowledge themselves as such and, consequently, to both report and seek help. Firstly, there are specific myths about the victimization by DFSA, related to the type of consumption and the substances involved. These misconceptions add to the social questioning faced by victims related to the violence suffered, within a sociocultural framework that maintains a double standard regarding the expected behavior by men and women with drug use and sex. In addition, victims suffer amnesia or difficulty to remember the assault because of the memory loss produced by the psychoactive substances involved. Moreover, the lack of injuries is usual, resulting from a lower use of force by assailants, as the victims do not resist due to them being disabled under the effect of substances.

3.1. Myths and misconceptions about the DFSA phenomenon

Over the last decades, multiple authors have attracted attention to the existence of widespread media attention deviated from the reality of the DFSA phenomenon [19–22,41,42]. There have also been calls for attention in Spain [23,54,148]. Perceiving as true the ideas that are actually far from reality involves a double risk. On one hand, it makes it difficult for victims to identify their own experience as a sexual crime, due to the event being far from the generalized or socially accepted idea. On the other hand, myths and misconceptions inhibit the perception of the true risks for the general public and even for the professionals involved, which makes difficult effective prevention. The central myths specifically related to DFSA involve the type of consumption, used substances and the state of the victim during the assault. Other myths are common to other kinds of rape, such as the relationship between victim and assailant.

i. *Dominance of "drink spiking".* DFSA is classified as opportunistic or proactive based on the *modus operandi* used by the assailant [18]. Opportunism involves assaults after the voluntary use of substances by victims, whereas involuntary intake happens in proactive assaults, in which assailants covertly or forcibly administer substances to victims. Covert use refers to the surreptitious administration of substances, usually in drinks known as "spiked drinks" [19]. A common misconception holds that in most DFSA cases, the temporary disability experienced by

victims result from involuntary consumption through covert administration. However, the evidence from several countries points out that most assaults are opportunistic and that covert administration is relatively infrequent [19,21,22,24]. One study about alleged DFSA cases in the UK confirmed the presence of unexpected substances at only 2 %, attributing to covert drug administration [41]. Nevertheless, a negative analytical result does not rule out involuntary consumption. Various factors can influence the underestimation of incidence based on analytical results, a key factor being the delay in reporting due to the disappearance of substances from the victim's body. In turn, a positive analysis does not necessarily imply covert administration to perpetrate an assault [65]. In this way, the suspicion of involuntary consumption is a common criterion for trying to approximate the incidence of proactive DFSA. Using this criterion, other studies suspected covert administration in less than 1 % in the United Kingdom [20] and 3 % in France [149]. This suspicion increased to 22 % in studies from Norway [21], and 24 % in Spain [23]. In addition to these low values, other studies associated the suspicion of covert administration with the voluntary use of psychoactive substances by victims. In this sense, in a Canadian study of alleged sexual assaults, the suspicion of proactive DFSA was 21 %, of which 88 % had used alcohol immediately before the assault [42]. Another similar work in Australia identified suspected proactive DFSA in 17 % of cases, in 77 % of which victims had consumed alcohol immediately before the attack [65]. The Spanish case studies focused only on cases with suspicion of involuntary consumption, identified possible cases of proactive DFSA in 6 % [55], 11 % [56], and 31 % [28]. The last study also associated the suspicion of proactive DFSA with the previous voluntary use of psychoactive substances by victims [28]. Despite this, the classification of the case as proactive may be erroneous, even based on the victim's statements. The doubt or fear about whether to admit the consumption of drugs may lead to incomplete or inaccurate descriptions [21,41,60,65,75]. On the other hand, court confirmation is another way of approaching the determination of the prevalence of opportunism versus proactivity. Convictions in Spain proved the covert administration of substances in 24 % of the sentences handed down between 1996 and 2016, while the assailant took advantage of the vulnerability derived from voluntary consumption in the remaining 76 % [59].

ii. High involvement of "date rape drugs". Another common misconception about DFSA is the association of covert administration with a specific group of substances called "date rape drugs". This term was developed by the media to describe a group of substances used by assailants to intoxicate potential victims and increase their vulnerability to sexual assault [22]. Among others, this group includes substances like flunitrazepam, ketamine and gammahydroxy-butyrate (GHB) [21,22,41,42,66,150]. Scopolamine or "burundanga" is another substance frequently linked with DFSA by media in Spain and Latin American countries [151–153]. However, the evidence collected during the last two decades indicates that the involvement of these substances in DFSA is practically anecdotal [19,22]. The prevalence of GHB ranged from 3 % to 1 % in other various studies [61,62,73,154], being less than 1 % [24,41,74] or not detected [20,21,23,28,72]. Flunitrazepam detection was from 2 % to 3 % [154,155], less than 1 % [21,22,24,61,66] or not detected [28,41,62,72,73]. Regarding ketamine, various studies indicated a prevalence of less than 2 % [41,61,62,73] or no detection [21]. In Spain, only one study indicated the use of GHB in a specific case, although through symptomatic diagnosis [67]. No study detected flunitrazepam, and one study detected ketamine in 2 % of cases [23]. Concerning scopolamine, it has been documented in other

forms of violence [156,157], but there are no studies with forensic evidence on its use in DFSA.

iii. All victims are sedated. Incapacitation resulting from intoxication impairs decision-making, judgment, the ability to consent to sexual activity, and to resist unwanted sexual advances [65,74]. Symptoms usually related to this situation are sedation, hypnosis, confusion, drowsiness or unconsciousness, which are produced by sedative-hypnotics or depressant substances [24,158] and match with the effects expected from "date rape drugs" [76]. However, intoxication related to victimization by DFSA also involves other symptoms. Victims may even be awake and disinhibited, a possibility usually not covered by media [41]. Psychostimulants and hallucinogens also impair judgment, causing impulsivity, and altering the ability to make decisions affecting the sexual sphere. These substances disinhibit and increase the libido making victims more susceptible to sexual activity [41,61,159]. Cocaine, amphetamine, and amphetamine-type stimulants (ATS) are associated with victimization by DFSA because of their ability for disinhibiting, increase sexual desire, and susceptibility to sexual interaction [76]. ATS include new psychoactive substances with a large prevalence in Spain, such as synthetic cathinones, which increase sociability and sexual arousal [57,63,76].

iv. Unknown assailant. A widespread myth about rapes is that assailants are mainly people unknown to victims, an idea shared by 40 % of the Spanish population [160], despite only 19 % of rapes outside couples being perpetrated by strangers [5]. This misconception is extensible to the DFSA phenomenon. Studies from Spain and other countries observed that in most cases victims and assailants knew each other before the assault [23,55,56,60,146]. In Spain, assailants were recent acquaintances in 59 % [28] and 36 % [23] of the cases, and strangers in 15 % [28] and 21 % [23]. In other countries, assaults perpetrated by recent acquaintances reached 62 % [65], 24 % [60], and 17 % [136]; a friend was involved in 45 % [136] and 32 % [60]; the partner in 9 % [136] and 3 % [60,65]; and a stranger in 30 % [60], 15 % [65] and 8 % [136] of the cases. According to the study of Spanish convictions, 72 % of cases involved assailants whom victims knew already before the assault [59]. Regarding the number of assailants, despite the high media coverage of recently famous cases in Spain that involved group assaults [161,162], national studies observed only one assailant in all [23] or in most of the alleged assaults [28,56]. Specific case studies observed both only one [68,71] and several assailants [58,67,69]. Efforts are necessary to avoid the extension of new misconceptions related to sexual violence and DFSA. Studies from other countries also observed only one assailant in most cases [60,65]. According to the review of Spanish convictions, 87 % of cases involved only one assailant [59].

3.2. Social perception of sexual violence mediated by drugs

Most of the Spanish population is somewhere between support and condemnation of sexist attitudes, sustaining more restrictive perceptions about the expected behaviors of women compared to men [160]. These attitudes tend to detract women's veracity when they become victims of violence, judging them based on personal characteristics, such as their drug use or sexual behaviors [160]. Various studies recognize the existence of a double standard related to alcohol consumption, observing different considerations based on gender, that is, depending on whether drug use is carried out by men or women [128,163–165]. Social sexist attitudes contribute to the toleration of the behavior of male assailants while blaming women for the violence they suffered [166]. In this sense, male consumption is associated with a loss of self-control that socially exempts men from responsibility for their violent actions

[128]. However, women's use is associated with sexual promiscuity, which promotes blaming them for suffered assaults [128]. This situation leads female victims of DFSA to suffer greater social blaming when their intoxication resulted from the voluntary use of drugs. Up to 15 % of the Spanish population thinks a woman sexually assaulted while drunk is partly responsible for the assault because of having lost control, while 99 % consider it unacceptable to give substances deliberately to women to maintain sex [160]. In this way, women who were under the influence of alcohol at the time of the assault are socially viewed as responsible for the attack to a larger extent than sober women and receive less credibility [163–165,167,168]. On the other hand, concerning the use of substances by assailants, the attribution of violent episodes to consumption justifies the behavior of the aggressor, which implies tolerance towards violence [160]. In this sense, in Spain, 46 % of women and 50 % of men think that alcohol is often the cause of a man raping a woman [160]. Altogether, these perceptions condition the victim's ability to identify herself as such, which influences her decision not to communicate the episode, not to make a complaint, and not to seek adequate help [159,166], especially among the younger women [5]. In this sense, the prevalence of some sexist attitudes among women is striking. The total or moderate agreement with the perception that a woman sexually assaulted while drunk is responsible for the assault was 2 % higher among women [160]. Likewise, within a national sample of women from 18 to 29, 31 % acknowledged getting drunk occasionally to the point of not remembering anything that happened; however, the result rose to 56 % when asking about this behavior in the group of female friends [96]. This difference pointed out a higher own consumption than that initially recognized. The underreporting that affected initial answers relates to the double standard based on gender around alcohol consumption. Another study with students from 18 to 24 observed that women thought their family refused more alcohol use by females than males [108]. Society is responsible for the attitudinal, behavioural and relational development of young people [43]. In addition to the lack of adequate social support, the decision to not report or seek help is also influenced by distrust in institutions and shame in reporting a sexual event [159,166].

3.3. Individual difficulties: amnesia, lack of injuries and emotional harm

Many victims of DFSA suffer total or partial amnesia, with difficulty for remembering the assault [41,62,65]. In Spain, a study observed 89 % of DFSA victims experiencing amnesia, compared to 20 % of victims from other sexual assaults [28]. In another study, amnesia affected 80 % of the cases that documented symptoms [23]. Specific case studies also observed amnesia or memory loss [58,67–71]. Studies from other countries confirmed amnesia as a common symptom in victims of DFSA. In Australia, 24 % of victims did not remember the episode, and 59 % had imprecise memories [65], situations that affected 28 % and 53 %, respectively, in another similar study in South Africa [60]. The total loss of memories affected 37 % in another study conducted in Norway [21]. The confusion caused by amnesia can lead the victim to question the credibility of her own story. In this way, loss of memory reduces the probability that the victim report [150] and conditions investigation, declaration, and prosecution [65].

The minimization of the importance of the suffered violence is even more common when the assault leaves no physical injuries, so the lack of injuries makes difficult the identification of the episode as a report crime [166]. In this line, 57 % of Spanish women aged 16–24 who were victims of sexual violence on some occasion did not consider the episode important enough to make a complaint [5]. Several studies observed that physical, genital or extra-genital

injuries are less frequent when the victim is disabled [146,169]. According to a comparative study, 33 % of victims of incapacitated assault suffered physical injuries, vis-à-vis 57 % of victims of forced rape [169]. This difference results from the lower resistance exerted by an incapacitated victim with whom the aggressor would need less force, and the physical damage to the victim would be also less [169,170]. This lack of injuries affected about 45 % of alleged DFSA cases reviewed by two case studies in Spain [23,28]. This was also a common observation in specific case studies [58,67–71]. A Canadian study did not observe physical injuries in 67 % of cases [171]. Regarding genital injuries, a Spanish study did not observe them in 82 % of the cases in which this parameter was documented [23]. The absence of genital and extra-genital lesions was 69 % and 38 %, respectively, in a study from Norway [21]; 43 % and 52 % in South Africa [60]; and 37 % and 30 % in Canada [146].

Emotional harm suffered by victims relates to the lack of communication of the violent episode [5]. Victims of sexual violence suffer significant psychological damage, and their mental health is severely affected, with intense feelings of sadness, low self-esteem, fear, insecurity, anguish, shame, and guilt [5,172,173]. These emotions can lead to anxiety and depression, seriously affecting the quality of life of the victims [172]. Around 86 % of victims of sexual violence acknowledge a significant affection of their physical or mental well-being, while psychological and psychiatric consultations predominate among those seeking formal assistance [5]. However, the feeling of guilt prevails among the emotions experienced by victims of sexual violence, compared to other forms of violence. Up to 30 % of victims of sexual violence by partners or ex-partners experience feelings of guilt [5]. Concerning victimization by opportunistic DFSA, this high prevalence of feeling of guilt relates to the normalization of sexist social perceptions about the expected behaviors of women and men around drug use and sexual interaction.

3.4. Other profiles and contexts of victimization by DFSA

Beyond leisure context and young women, other contexts and profiles of victimization by DFSA must also be studied so that no one will be left behind, as per the demands of the 2030 Agenda [39]. Since violence particularly affects the most vulnerable people [1], those with poor health conditions, such as people suffering disabilities or illnesses are especially vulnerable to violence. Their lower abilities to resist eventual assaults increase the risk of victimization, in line with the hunting model [34,78,174]. Regarding DFSA, in these cases, the usual limitations resulting from physical or intellectual disabilities add to the temporary incapacity produced by psychoactive substances. In a Spanish case study about alleged female victimization by DFSA, victims with physical and/or mental disabilities reached 10 % [23]. Although this value may seem low, it is substantively significant, taking into account the small proportion of people with disabilities in the studied population, about 19 % of the total women [175]. In this sense, the victimization of minority groups may be undervalued due to its low proportion in the population, as observed by a recent study about the sexual exploitation of girls with intellectual disabilities [176]. Moreover, victims suffering physical and/or intellectual disabilities or illnesses may experience increased difficulties as regards reporting or seeking help [176]. A lesser access to justice is also related to marginalization and disengagement by the police when reporting an assault [174,176,177]. In addition, intellectual disability may lead to a lack of understanding of the criminal meaning of sexual abuse [174]. Case studies of alleged DFSA in other countries observed physical or cognitive disabilities in 9 % [21], 6 % [171] and 5 % [73]. Previous mental health problems were observed in 44 % [21], 27 % [171], 25 % [73] and 12 % [60]. In another study, depression, anxiety, and physical

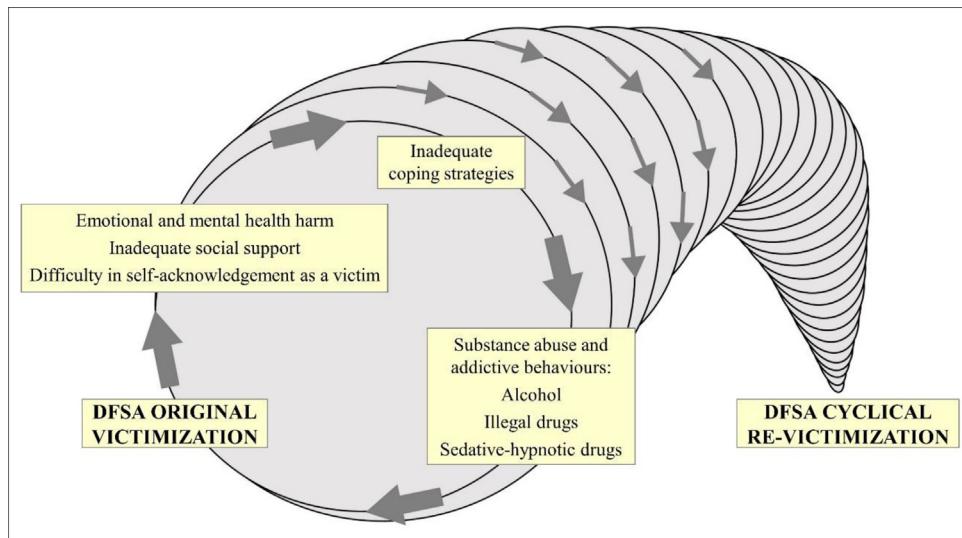


Fig. 3. The spiral of cyclical re-victimization by opportunistic DFSA. Inadequate social support and inadequate coping strategies lead to the use of psychoactive substances that can trigger incapacitating effects on victims and increase their vulnerability to suffering new assaults in a cyclical re-victimization process.

illness affected 9 %, 4 %, and 15 %, respectively [60]. On the other hand, health problems often involve the use of psychoactive substances, following prescribed therapies, or self-medication. In this sense, 93 % of victims with disabilities in the Spanish study received psychotherapy for mental disorders such as anxiety or depression [23], so victimization by DFSA is suspected to be widespread among women suffering disabilities who are being treated for these types of disorders. Studies from other countries point in the same direction. Prescription drug use among victims amounted to at least 49 % in one study in Australia [65], while 29 % used them in another study in Canada [73]. When specifying by drug type, the use of antidepressants was observed in 11 % [60] and

7% [41]. In turn, victims used sedative drugs, such as benzodiazepines, in 16 % [41], 9 % [21] and 3 % [60].

3.5. Perpetuation of victimization by opportunistic DFSA

Experiencing sexual assault is strongly associated with subsequent re-victimization [1,25,167,178–180] as well as with alcohol and other drugs abuse [181–188]. The intense emotional harm and mental health damage suffered by victims of sexual violence frequently lead to the development of addictive behaviors focussed on using psychoactive substances as an adaptive response [172,189,190]. However, coping strategies based on the use of

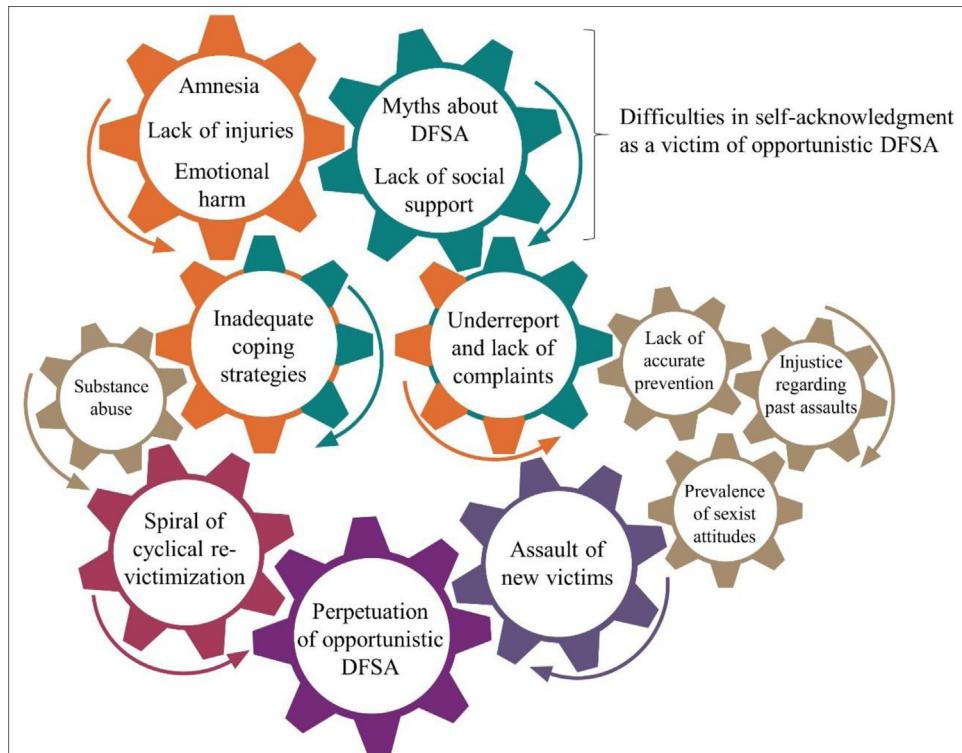


Fig. 4. The perpetuation of the victimization process by opportunistic DFSA from the difficulties faced by victims in acknowledging themselves as such.

psychoactive substances can trigger incapacitating effects on victims and increase their vulnerability to suffer new assaults. In this way, the temporality of voluntary consumption is a critical aspect of victimization by opportunistic DFSA. Consumption can be both an antecedent and a consequence of violence, contributing to both the appearance and maintenance [189,191–194]. On this basis, some authors propose a bi-directional connection between alcohol consumption and sexual assault [25,195,196]. Following this line, this study defines a spiral of cyclical re-victimization as a specific characteristic of victimization by opportunistic DFSA. Since the vulnerability resulting from the disabling effects produced by voluntary consumption is a defining factor of this type of sexual violence, coping strategies based on substance use can potentiate these spirals of re-victimization. *Fig. 3* shows this concept, illustrating how an initial violent episode can be the preamble of subsequent assaults, a sequence capable of locking the victim into a dynamic of suffering by cyclic re-victimization. In this way, victimization by opportunistic DFSA tends to self-perpetuate through a positive feedback loop, especially affecting the most vulnerable people. Regarding re-victimization by DFSA, a Norwegian study about alleged DFSA cases observed that 40 % of victims had already suffered sexual assault previously [21]. This value was 4 % in another similar study in South Africa [60]. However, data about previous sexual assaults are not collected, so more research is necessary regarding cyclical re-victimization by opportunistic DFSA.

However, the accountability for the positive feedback loop that perpetuates violence goes beyond the specific experiences of victims and corresponds to the community within which such violence happens. In this sense, the perpetuation of the victimization by opportunistic DFSA results from the maintenance of a violent cultural background compounded by sexist social attitudes and a gender-based double standard on consumption and sexual interaction. *Fig. 4* illustrates how the difficulties faced by victims in acknowledging themselves as such contributes to the perpetuation of the victimization process. On one hand, the lack of direct social support consequent to cultural violence feeds the perpetuation of the victimization process by favouring both the

underreporting and inadequate coping strategies. Furthermore, underreporting involves injustice regarding past assaults, as well as a lack of proper knowledge about the real dimension and nature of the problem, which is necessary for accurate prevention. Likewise, this lack of knowledge about the phenomenon favours the preservation of the cultural violent background and sexist attitudes justifying assailants and blaming victims. In short, a breeding ground for new assaults and the perpetuation of victimization by opportunistic DFSA. On the other hand, inadequate coping strategies based on the use of psychoactive substances can lead to substance abuse and trigger incapacitating effects on victims, which increase their vulnerability to suffering spirals of cyclical re-victimization.

In Spain, just as the distribution of complaints, the seeking of formal help among female victims of sexual violence after suffering an assault also takes an inverted U shape according to age. In this sense, more than half of the assaulted women from 16 to 34 do not seek help [5]. Consequently, regarding victimization by opportunistic DFSA in particular, which mainly affects young women, a lower percentage of requests for help is expected due to the convergence of specific factors, such as amnesia, the absence of injuries, and the widespread related misconceptions. Therefore, this observation suggests that the spiral of cyclical re-victimization by opportunistic DFSA could be a social problem of potentially high dimensions. This could be the case especially among young women, considering the hegemonic recreational model combining drugs use with opportunistic sexual interaction.

3.6. Increasing awareness of the severity of female victimization by opportunistic DFSA

Breaking the perpetuation of sexual violence by opportunistic DFSA is possible. In the first instance, society must recognize the existence of this problem within itself. This is an essential step so that society may be able to acknowledge victims of this form of sexual violence and that both victims, as well as assailants, recognize themselves as such. In this sense, from a public health perspective, the authors consider the implementation of a new

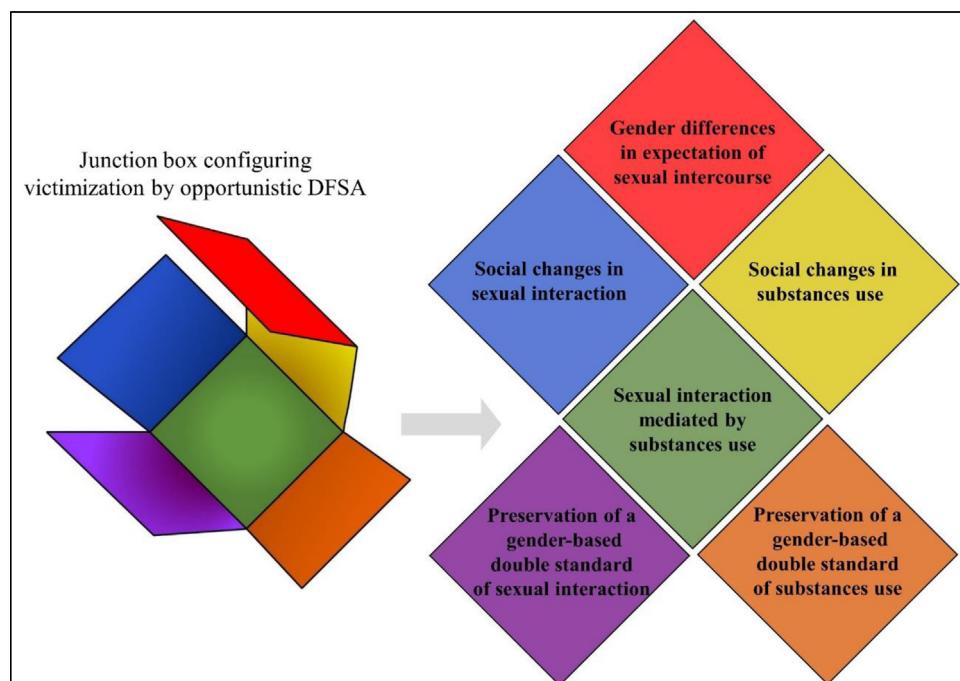


Fig. 5. Opening of the junction box configuring victimization by opportunistic DFSA by the analysis of intersecting dimensions.

viewpoint about the phenomenon as an urgent need. The victimization of women by opportunistic DFSA in leisure contexts is a severe form of sexual violence needing a specific recognition.

Although the mediation of psychoactive substances in human sexual interrelation is a recurrent phenomenon throughout history [11], this mediation is subject to modifications as social changes occur that affect consumption patterns and sexual interaction. In this sense, currently, the convergence of several key factors makes it necessary to take this step and implement a new viewpoint about the phenomenon, able to identify the gravity of this form of sexual violence, which is severely affecting the hegemonic recreational model.

The intersectional approach applied in this study allows visualizing the multiple factors configuring the victimization by opportunistic DFSA in youth leisure contexts, as illustrated by the opening of the junction box shown in Fig. 5. In the current model of leisure, the social changes involving both the use of psychoactive substances and sexual interaction intersect to give rise to a sexual interaction mediated by consumption. This dynamic favours sexual encounters under the effects of psychoactive substances. In this situation, the capacity for consent is severely compromised, facilitating an opportunistic sexual approach, which fits into male expectations based mainly on the satisfaction of the desire for sexual pleasure. Likewise, social changes involving drug use and sexual interaction coexist simultaneously with a gender-based double standard that condition the female expected behaviors regarding the consumption of psychoactive substances and sexual interaction. The six panels shaping the open box of Fig. 5 show the intersection of each of these dimensions, representing the configuration of victimization by opportunistic DFSA.

Likewise, in order to get proper visualization and social awareness of this form of sexual violence, an alternative term is necessary to identify the phenomenon in a more accessible and easily recognizable way than the overly long technicality of "opportunistic victimization by drug-facilitated sexual assault". An accessible name is expected to be useful in order to efficiently achieve a better awareness within adolescents and young people, who are the population groups primarily affected. The authors propose the term "take advantage" as an alternative name whose definition fits the nature of the opportunistic victimization by DFSA: "to use someone's weakness to improve your situation" [197], or "to make use of somebody in a way that is unfair or dishonest" [198]. Moreover, the popular usage of "take advantage" extends to situations when one person has sexual contact with someone who is semi or wholly unconscious due to the use of alcohol or other drugs [199].

Conclusions

The implementation of a new viewpoint about the victimization of women by opportunistic DFSA in youth leisure contexts is identified in this work as an urgent need in order to achieve progress in the fight against this form of sexual violence, primarily affecting young women. The recognition of this problem is an urgent public health need aligned with the global challenges of the 2030 Agenda for Sustainable Development committed to the elimination of all forms of sexual violence against women [39].

The identification of the victimization by opportunistic DFSA proposed herein is consistent with the call to action encouraged by the United Nations through the current initiative UN75 2020 AND BEYOND, entitled "Shaping our future together" [40]. In this sense, society must recognize the existence of this problem within itself, as an essential step to be able to identify the victims of this form of sexual violence and adequately support them. Although mediation of psychoactive substances in human sexual interrelation is a

recurrent phenomenon throughout history, it is subject to modifications as social changes occur that affect consumption patterns and sexual interaction. The social changes involving both the use of psychoactive substances and sexual interaction intersect in the hegemonic recreational nightlife model to give rise to a sexual interaction under the effects of psychoactive substances. In this situation, the capacity for consent is severely compromised, facilitating opportunistic sexual contacts, which fits the behavior of sexual assailants, who select their victims based on their level of vulnerability or their inability to resist an assault. At the same time, social changes involving drug use and sexual interaction coexist with gender-based double standards conditioning the expected female behaviors regarding the consumption of psychoactive substances and sexual interaction. As such, significant population sectors associate female use of drugs with promiscuity, justifying assaults, and blaming victims, meanwhile male consumption is perceived as a factor excluding assailants from liability. This sexist cultural background adds to the existence of widespread misconceptions about the phenomenon, and to other obstacles such as amnesia, the lack of injuries and emotional harm in victims. Altogether, these factors make it difficult for women victims of opportunistic DFSA to acknowledge themselves as such, reducing the possibility of reporting the episode and seeking adequate help. Consequently, victims may turn to coping strategies based on addictive behaviors and the abuse of psychoactive substances as adaptive responses to mental health damages. This situation may lead them to experience new situations of vulnerability which favour further assaults and, thus generating spirals of cyclical revictimization by opportunistic DFSA. Breaking the perpetuation of violence corresponds to all the community within which that violence happens. The lack of proper social support feeds this perpetuation by justifying assailants and blaming victims, setting a breeding ground for future assaults and favouring both under-reporting and inadequate coping strategies. Furthermore, a particular affectation of people with physical or mental disabilities has been observed, an aspect requiring further attention so that no one will be left behind, as per the demands of the Agenda 2030. Society, as a whole, possesses the potential and responsibility to end the problem and shape a better future together, as pointed by the initiative UN75.

Several recommendations are proposed in this work to tackle this form of violence. Firstly, an alternative term is proposed to refer to the phenomenon in a more easily recognizable way than the technicality "opportunistic victimization by drug-facilitated sexual assault", especially for preventive purposes to improve understanding and raise awareness among adolescents and young people. "Take advantage" is proposed because its widespread usage involves sexual contact with someone who is under the effects of drugs. Secondly, a specific penal approach, adjusted and sensitized to the phenomenon, is also necessary, avoiding the discrimination among victims of DFSA based on their voluntary or involuntary use of drugs previously to the assault. Finally, in-depth knowledge is required to properly deal with the problem. In this sense, the implementation of victimization surveys is encouraged to achieve a better knowledge of the real dimensions of the issue, which is necessary for the development of well-targeted and evidence-based preventive measures consistent-with-reality.

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Declaration of competing interest

The authors affirm that there are no conflicts of interest.

CRediT authorship contribution statement

Pablo Prego-Meleiro: Conceptualization, Methodology, Investigation, Visualization, Writing - original draft. **Gemma Montalvo:** Project administration, Funding acquisition, Supervision, Validation, Writing - review & editing. **Óscar Quintela-Jorge:** Supervision, Validation, Writing - review & editing. **Carmen García-Ruiz:** Supervision, Visualization, Validation, Writing - review & editing.

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