

From “herbal highs” to the “heroin of cannabis”: Exploring the  
evolving discourse on synthetic cannabinoid use in a Norwegian  
Internet drug forum

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## **From “herbal highs” to the “heroin of cannabis”: Exploring the evolving discourse on synthetic cannabinoid use in a Norwegian Internet drug forum**

### **ABSTRACT**

**Background:** In the early 2000s, online vendors began selling an array of so-called “legal highs”—apparently organic produce made from exotic herbs. Simultaneously, members of online drug discussion forums began to debate the alleged effects of the new drugs, creating an enormous base of user-derived information based on personal experiences. **Methods:** This study combines the historical data spanning a seven-year period derived from a Norwegian drug discussion forum about synthetic cannabinoids and interviews with 14 male forum members who all had experience with the drug. By combining the two sources, this study reveals not only the evolving discourse on synthetic cannabinoid use but also how forum members related to the online information that they gathered and co-produced. **Results:** Analysis of the evolving online discourse revealed three distinct phases. The first was an enthusiastic phase, with users embracing the new drugs. The second was a phase characterized by growing ambivalence and scepticism towards use of the drugs. The third was one in which members of the community rejected the new drugs based on negative reviews from users. **Conclusion:** The analysis displays the communal process whereby members cooperate in the exchange of an extensive body of knowledge accumulated about synthetic cannabinoids, and the way in which this evolving discourse influences members of the forum in their views and representations of the drugs. Paradoxically, the online discussions of synthetic cannabinoids, which had great significance for their proliferation when they were initially introduced to the market, now seem to be a deterrent. The role of online drug communities in the development of new drug trends should receive renewed attention.

*Keywords:* Spice, Synthetic cannabinoids, Legal highs, Internet forum, Online community

## **Introduction**

Over the past decade, a wave of new psychoactive substances has diversified the global drug market (EMCDDA–EUROPOL, 2012). More than 450 new psychoactive substances are currently monitored by the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA, 2015), and producers operate as chemical innovators, constantly moving on to the next product in attempt to be one step ahead of the law (Vardakou, Pistos, & Spiliopoulou, 2010). As a way of managing information on this vast number of new drugs, consumers turn to the Internet to seek drug-related information and to share their experiences with others (Barratt, 2011; Belenko et al., 2009; Murguía, Tackett-Gibson, & Lessem, 2007). This collective sharing between users creates a huge amount of drug-related information that is freely available to everyone with an Internet connection. In the globalized and interconnected world in which we now live, these stories spread throughout digital social networks, with more and different illicit drug epidemics coming and going at a faster rate (Agar & Reisinger, 2003). The need to explore such online discussions is therefore important, as they may affect others who are curious about drugs.

Based on online data spanning a seven-year period and interviews with forum members, this study explores the evolving discourse related to synthetic cannabinoid use in a Norwegian Internet drug forum. The online data provide a longitudinal insight into discussions of the use of synthetic cannabinoids and the way in which they are represented discursively among users of the drug. The analysis also explores how those involved disseminate the online information that they gather and co-produce, displaying the communal process whereby members cooperate in the exchange of an extensive and cumulative body of knowledge about synthetic cannabinoids. This study of online drug discussions highlights how new forms of computer-mediated communication affect drug trends, and how new and unknown drugs are interpreted within increasingly globalized social spaces.

## **Synthetic cannabinoids**

The most prevalent new psychoactive substance on the European market seem to be synthetic cannabinoids (EMCDDA–EUROPOL, 2012; EMCDDA, 2015)—a large group of drugs with effects similar to those of cannabis, even though most are structurally different and have higher potency (Presley, Jansen-Varnum, & Logan, 2013; Seely, Prather, James, & Moran, 2011). Although the history of synthetic cannabinoid use is fairly short, such drugs are believed to have been available for purchase on the Internet and in selected “head shops” since as early as 2004 (Schifano et al., 2009). Nevertheless, it was not until late 2008 that researchers revealed the psychoactive substances that caused the intoxicating effects to be synthetic cannabinoids (Auwärter et al., 2009). Until then, the products had been initially marketed and sold as “herbal blends” and “incense” and as a legal alternative to marijuana, under the generic term “legal highs” (Schifano et al., 2009; Vardakou et al., 2010). Synthetic cannabinoids were dissolved in a solvent and sprayed onto a dried plant-derived base for delivery. “Spice” was one of the more popular products. Package labels indicated that such products were “not for human consumption”, in order to circumvent drug laws and regulation (Vandrey, Dunn, Fry, & Girling, 2012). The synthetic chemicals that were initially added clandestinely to the herb mixtures are today being commercially marketed in their own right (Griffiths, Sedefov, Gallegos, & Lopez, 2010). These chemicals are known by names such as BB-22, 5F-AKB48, STS-135, MMB-CHIMINACA and several others.

Online sites play an important role in marketing and exchange of consumer experiences related to such drugs (Bretteville-Jensen et al., 2013). The first user reports from people using synthetic cannabinoids were mainly spread through online forums, underlining the importance of the Internet not only as a source of the drugs but also for marketing and raising awareness of the products (Griffiths et al., 2010). These forums are of great importance, as user-orientated sites have often been rated as more useful and reliable than the official sources by

drug users themselves (Sumnall, Evans-Brown, & McVeigh, 2011). It is useful to explore the interplay between online drug-related discourse and the “real-life” experiences of those involved to understand how new ways of computer-mediated communication may influence the development of new drug trends.

### **Online communities**

The use of digital media and the Internet has become a normal and unremarkable aspect of everyday life. They have provided a revolutionary new means of interpersonal communication and connectivity, regardless of physical proximity (Zaphiris & Ang, 2009). These changes have also been widely exploited to enable the distribution of drugs, alongside all manner of information pertaining to them (Walsh, 2011). Internet access greatly facilitates the free and easy exchange of ideas, opinions, and unedited and non-refereed information about recreational drugs (Wax, 2002). For young people (15–24 years) in the EU, it has been shown that the Internet is the most popular source of information about illegal drugs and their use (Eurobarometer, 2008).

Internet has provided new scope for so-called computer-mediated communication (CMC), which provide the basis for interaction online and forming groups, or so-called virtual communities (Rheingold, 1993). Such communities are often understood as communities of choice, where individuals can choose to communicate on a variety of issues, developing a sense of obligation towards the community (Averweg & Leaning, 2012). Although the term virtual may suggest that these communities are less “real” than physical communities, these social groups still have a real existence for their participants and thus have consequential effects on many aspects of behaviour (Kozinets, 2002).

The basic principle of these web sites is their bottom-up technology (Walsh, 2011), which promotes autonomy, interaction, and participation from those who contribute. This unique

aspect of the virtual world makes it important to recognize that the information being accessed may be of questionable quality, not current, misleading or even dangerous—particularly for novice users (Monahan & Colthurst, 2001). With the proliferation of new drugs available for purchase, this aspect has become important as research struggles to keep pace with the frequent innovation that characterizes the market. Often the only information available is descriptions by innovative drug users (Griffiths et al., 2010). For adolescents or people curious about drugs, the nature of this information is of interest because it has the potential to alter the drug use behaviour of those who obtain it (Norman, Grace, & Lloyd, 2013). Although publicity could entail an increase in drug use, online discussions can also be characterized by a concern for safety and harm reduction among drug users (Soussan & Kjellgren, 2014), and can be framed in a way that privileges the pleasures of getting high (Barratt, Allen & Lenton, 2014). This shows the importance of the Internet for access to user-relevant information about illegal drugs, and it displays the uniqueness of the market for new psychoactive substances, in which online networking sites seem to play a crucial part in marketing and raising awareness of new products (Griffiths et al., 2010). However, few studies explore *how* such sites may influence the drug use of those involved (for a notable exception see Murguía, Tackett-Gibson, & Lessem, 2007), and none have explored the issue based on qualitative data from both online discussions and interviews with those writing the discussions.

### **Shifting drug trends**

Explanations of shifting drug trends, whether they concern heroin, ecstasy or synthetic cannabinoid use, always include multiple factors that shape the trajectory of use of a particular drug over time. In an attempt to answer the classic epidemiological question about illicit drug trends—“*why these people in this place at this time?*” (Agar & Reisinger, 2004, p.

253)—Agar and Reisinger developed “trend theory”. Their work served as a conceptual scheme to explain trends in illicit drug use (Agar, 2003a, 2003b; Agar & Reisinger, 2001). The goal was to explain increases and decreases in the popularity of specific drugs of interest during specified time periods by integrating ethnography and epidemiology (Agar, 2003b).

Agar and Reisinger’s work on “*narrative mechanisms*” (Agar & Reisinger, 2004, p. 262) is of great importance in explaining temporal patterns in descriptions of drugs by users. Their explanations of how drug use curves rise and flatten out are usually consistent with observable changes in the discourse related to a specific drug. When a new drug appears on the horizon, people rely on peer stories of personal experience to evaluate it. An interesting drug usually generates more positive evaluations when those most predisposed to drug experimentation try it. Over time, negative stories are produced, which in turn curb the rising curve of experimentation (Agar & Reisinger, 2004). The evolving, possibly more negative, representations of a specific drug offer large incentives for the willingness to experiment with it. Therefore, one of the most important influences on drug use may be “folk” perceptions of the acceptability of the drug (Carlson, Falck, McCaughan, & Siegal, 2004).

This way of viewing the narrative mechanisms of drug cultures, embedded in the stories shared among users, has a great bearing on the perceived attractiveness of a given drug, making drug experience as much to do with perception, culture, and subculture as with pharmacological properties (Hunt, Bergeron, & Milhet, 2013). In the globalized and interconnected world in which we now live, these stories spread throughout digital social networks, with more and different illicit drug epidemics coming and going at a faster rate (Agar & Reisinger, 2003).

The goal of this paper is to explore the evolving discourse related to synthetic cannabinoid use. The research questions are the following. How were synthetic cannabinoids represented in Norwegian online discussions in the period 2007–2014? How did this representation



influence synthetic cannabinoid users and related drug trends? The study will explore the interconnection between new synthetic cannabinoids, online developments, and drug trends.

## **Method**

In this study, representations of synthetic cannabinoid use are analysed over a seven-year period using online data gathered from a Norwegian Internet drug forum, in addition to qualitative interviews with fourteen synthetic cannabinoid users recruited from the forum. The selected web site was sampled purposively, as it contained the largest amount of posts related to drug use in Norway. The forum is open to the public, though one has to be a registered member in order to write posts. Within the forum, users share their experiences and discuss a wide plethora of drugs and related topics, with moderators only prohibiting the sales or marketing of drugs. As of December 2014, the forum contained over 260 000 posts related to drug use.

Discussions were passively observed on the forum over a six-month period, and data were gathered in December 2014. A search using the forum's built-in search engine for the terms "synthetic cannabinoids", "spice", and "JWH" yielded 115 discussion threads. In many of them, synthetic cannabinoids were only briefly mentioned. Only those where synthetic cannabinoids were the main discussion topic were kept for further analysis. Of the initial 115 discussion threads, 56 met the criteria. They spanned the period from early 2007 until December 2014. The threads were copied in their existing form to a text-editing document using snipping tool software to retain the existing timeline of the discussions and to keep as much information as possible intact, such as the date and time of each entry as well as headings, pseudonyms, profile pictures and statistics from each contributor. The threads had a varying number of entries. The longest contained over 400, but usually they were shorter. In total, the 56 selected discussion threads contained 1909 entries. Threads were kept in their existing form to retain the natural discussion between the forum members. By doing this, it

was possible to follow the discussion in each of the threads specifically and to observe the online interaction and debates between forum members. In line with the discursive approach, the analysis focused on the ongoing process where members debated, stressing the importance of the cultural apparatuses and biographical histories that allow such talk to be produced and understood (Denzin, 1999).

As the forum is open and accessible for everyone with an Internet connection, it arguably constitutes a public space (Roberts, 2015). Therefore, the online data were gathered covertly. However, several steps were taken in order to secure the privacy of those involved. The selected forum and the online pseudonyms used by forum members are not referred to by name, recognizing that these online identities could be as valuable as offline identities. In addition, quotes were translated from Norwegian to English, in order to prevent them from being traced to their existing form, which further secures the privacy for both individuals and the forum itself.

In addition to the online data, members of the forum were recruited to participate in qualitative interviews. The forum had a built-in messenger service, which made it possible to communicate privately with other members. By creating a user profile, forum members were contacted directly and asked whether they wanted to participate in the research project. Approximately 60 members who recently had posted entries about their own experiences with synthetic cannabinoids were contacted through the private messaging service. Information about the research project, the researcher, and preservation of anonymity was provided. Those who did not respond were sent a follow-up request two weeks later. If they did not reply, no more effort was made to recruit them. Of the approximately 60 members initially contacted, 14 replied positively. They were all males aged between 16 and 29. The unilateral gender distribution in the final sample may be a result of recruitment via the Internet. Even if such a sampling method is efficient and economical, selections of drug users that are generated

through the Internet often have a high percentage of men and usually a predominance of young people (Miller & Sønderlund, 2010). This corresponds well with the final sample, which can best be described as a strategic and specific availability sample from one source of recruitment. However, most sources indicate that synthetic cannabinoid users are primarily young males (Vardakou et al., 2011; Zawilska & Wojcieszak, 2014), which corresponds with the sample in this case.

The interviews, conducted in 2012, lasted approximately one hour and were guided by a list of topics related to drug use and involvement on the forum. Due to the wide geographical spread among the interviewees, most were conducted using Skype. Two were interviewed face to face. The interviews were semi-structured and the interviewees were encouraged to recollect the timeline from the first time they had heard about synthetic cannabinoids until the time of the interview. Unlike the lengthy period of the online data, the interviews were conducted over a period of three months. The interviewees were probed for stories of specific experiences with synthetic cannabinoids and involvement on the forum that was relevant to their stories. In this way, they not only recollected their own experiences but also told stories about the social life on the forum and how they used the online information.

Interviews were tape recorded, transcribed verbatim, and coded thematically with a broad range of codes, using the HyperRESEARCH qualitative analysis software. The interviewees are anonymized and referred to with pseudonyms. There were multiple passes over the dataset as the codes developed, and they covered topics such as the first time they had heard about “legal highs”, learning how to use the drug, their first use, and the attractive and unattractive aspects of the drug, as well as several codes related to the online community of which they were members. These accounts served as a way of relating the online content to the experiences of those involved, thus embedding their social reality in online settings within their everyday offline life.

### **From “herbal highs” to “the heroin of cannabis”**

The analysis describes three phases in the online discourse related to synthetic cannabinoid use. The first was an enthusiastic phase, with users embracing the new drugs. The second was a phase characterized by growing ambivalence and scepticism towards use of the drugs. The third was one in which members of the community rejected the new drugs based on negative reviews from users. The three phases display a communal process whereby members cooperate in the exchange of an extensive and cumulative body of knowledge about synthetic cannabinoids.

### **“Herbal highs”: Enthusiasm and embracement in a burgeoning drug market**

The first posts regarding some sort of synthetic cannabinoid product on the forum date back to 2007. During this period, forum members started to read user reviews on other drug related sites, as well as noting web sites offering an array of smokable herbs for sale, marketed as legal marijuana. There was a sense of confusion regarding the new products, and several members turned to the online community for advice. The following entry was posted in April 2007 and was one of the first mentioning the new herbal products that were offered on the Internet.

Has anybody tried herbal smoke? I've read some English-language forums where this really seems to have taken off. It is evidently legal, but I'm still a little concerned. Does anyone have experience with this? What I have understood, and suspect, is that this must not be interpreted as cannabis. This is not a drug but legal herbs, and it doesn't contain THC. However, the different herbs have different effects; some create powerful effects,

while others calm you down. I read that several of them may resemble THC, and that some of them are more powerful.

The discussion that followed was marked by the same amazement and the same questions as the thread starters. Members had little or no information besides the promotional texts offered by the online vendors selling the products. These were apparently misleading and often advertised “an exotic incense blend which releases a rich aroma” and “not for human consumption” (Sedefov et al., 2009), without offering any information about the psychoactive compounds added to the herb mixtures. Convinced that the products only contained organic material, several forum members experimented with the drugs and shared their experiences with their online peers. This member posted a lengthy and detailed report in December 2007, describing the first time he tried one of the new herbal mixtures.

This trip report is not about the cannabis strain “Skunk” or any of its hybrids. “Skunk” (as the word is used in this report) is the name of a new and very powerful smokable “legal high”. (...) It looked like tiny green plant and herbal pieces, covered with a kind of gray-green layer of powder or tiny bits of plant material. There were also half a dozen small brown plant bits and some stalk-like brown stuff in the bag. (...) I had been warned that this was potent stuff so I didn’t use more than about 0.2 grams. (...) After I blew out the smoke, I felt something happening. I remember thinking something like “gosh, I’m stoned!” In a few seconds, I went from being sober to completely incomprehensibly stoned. It was like turning on a switch. (...) It occurred to me that putting on loud music would be too much, I was so incomprehensibly stoned. If this sounds like an edgy and borderline uncomfortable high, you’re right. Some people will probably get horrible anxiety and panic attacks from this drug and the strength of it. However, after I took a couple of good and slow breaths, I felt that the anxiety that had slipped into my nerves shortly disappeared. What was left was an incredibly good sense of euphoria (...).

The trip report covered several pages, and the member described the effects that he experienced in a detailed manner, also noting the timeline and the development of the high. He also posted pictures to show how the product looked and the dose that he had consumed. This way of describing the dosage and administration of the drug, as well as the subjectively experienced effects, is common in trip reports shared online (Soussan & Kjellgren, 2014). In the time that followed, several members experimented with the new drugs and posted their experiences for others to read, contributing to a large base of online user-derived information.

Many of the interviewees recollected this early period of the synthetic cannabinoid market with great enthusiasm. Eric, one of the forum members interviewed, vividly described his technical insights and the fascination that he had for opportunities offered by new social media and the Internet. On the forum, he started reading other users' trip reports about the new herbal mixtures and told that he became curious by reading about them. His fascination for new drugs found fertile ground in the extensive drug-related themes on the forum, and he described an abundance of user-oriented and user-based information. When asked about the purpose of the trip reports, he replied: "On the forum, people write trip reports based on the substance they used, which describe the intoxication in general, address the positive and negative aspects, and the state of mind they got into. This was how I first read about someone who'd tried Spice." In this sense, the trip reports served as an online review of a given drug, discussing both its positive and negative effects. By reading the trip reports, Eric became aware of the new herbal mixtures that began flourishing online and how users rated their effects.

In interviews with the forum members, a recurrent theme was their reference to the forum when talking about their first time trying one of the herbal mixtures. They told about actively seeking information before the first experiment. The online content served as an information base and as a starting point for the interviewees when they first decided to purchase the new

herbal highs. By reading the reviews of other users, they were informed about what to expect and which drug they should choose. In this way, the trip reports served as a powerful marketing channel for a new drug of which they had no knowledge, especially when the reviews were positive. Leo explained how he became curious about trying it in the first place.

I read on the Internet, mainly the forum, and I read other members' experiences. I talked with people over the Internet who had tried it, and I've generally been curious. I read on the forum that people had positive experiences with it, and I got curious and wanted to try it. By then I had read a lot about it, I mean hundreds of user experiences, so I didn't feel that it was dangerous, and in the beginning, there were mostly positive reviews.

The mysterious herbal highs genuinely appeared to have a cannabis-like drug effect. They also possessed several attractive characteristics held in positive regard by those using them. Not only did they cause an effect but also they were much cheaper than cannabis, easily accessible, semi-legal, and invisible in regular urine screenings. All these factors made the online community embrace the new drugs, without really knowing what caused the intoxicating effects.

The role of the online community when the drugs first hit the market was essential in enabling users to share information and to co-operate in disseminating facts about the new drugs. Not only did it raise awareness of the new drugs and the perceived lack of long- or short-term harm but also the good ratings from online peers contributed to an online discourse where users embraced the new drugs as a positive addition to the drug market. Synthetic cannabinoids created a "buzz" in the online community caused by their early adopters. This publicity was an influential factor for those surfing the Web for information on drugs. They were tempted by other users' experiences with the drug, especially when the positive representations were from a community that they trusted. Because the reference base was

other users, the information was considered to be unbiased and deemed to be more trustworthy than that from other sources.

### **From herbs to chemicals: Ambivalence in an intermediate phase**

On 19th December, 2008, the first post that revealed the actual content of “Spice” was written on the forum. One member copied an entry from the famous drug forum *Erowid*, stating that results from a German analysis of Spice proved its intoxicating content to be the synthetic cannabinoid JWH-018. The member also noted: “Then it is more or less confirmed that Spice contains a synthetic cannabinoid. I would say that this is positive, because then the people who smoke it at least know what kind of drugs they’re using.”

The awareness of the synthetic compounds that were added to herbal mixtures also changed the online synthetic cannabinoid market. Now that users were aware of the chemicals that were added, it did not take long before the online vendors started selling synthetic cannabinoids without being added to herb mixtures (Griffiths et al., 2010). Suddenly, the Internet bloomed with shops offering JWH-018 and several other synthetic cannabinoids. Simultaneously, ambivalence emerged among the online community, with forum members debating the possibility of risks and the lack of knowledge related to the use of synthetic cannabinoids. Some called for caution, but others considered the positive aspects of the new drugs to be more important than the possible risk. The following entry, posted on a lengthy thread called “*The big legal highs thread*” in February 2009, exemplifies this discussion.

(...) Use of drugs like cannabis and MDMA is unquestionably risky; however, we know a lot about them, and there is enough information out there that one can be aware of the dangers involved. However, with many of these new unknown substances, we don’t know anything. I’m not saying that all legal highs are dangerous, many of them are probably



relatively harmless, the point is that we do not *know*, and therefore one should be extra careful (...).

Only minutes later, another member replied as follows.

This thread is informative, but at the same time kind of “stigmatizing” in my opinion. There are so many advantages of the legal highs market (...) I mean, what’s really bad? Having to serve time or get fined, might not be able to go to the US, or get that job you wanted, for a wretched gram of drugs? Alternatively, use legal highs with equally good effect, which is cheaper and cannot harm your future in the same way. I think it’s silly to say that one should use drugs rather than legal highs because they are more “safe”. They are absolutely not.

The discussion continued among the members of the forum, revealing the growing ambivalence among the community members. Some were concerned about the potential for risk in using synthetic cannabinoids and urged others to be careful. Others argued that the positive elements of the legal high market outweighed the possible harm caused by the new drugs, creating contradictory representations of the drug.

Several of the interviewees also recollected this period with ambivalence. Some still emphasized the positive aspects, while others grew sceptical. Lars, one of the forum members interviewed, was fascinated by the synthetics and continued to argue for their low price and convenience of purchase. He explained.

Suddenly, this powder arrived that gave the same kind of effects [as cannabis]. It could be compared to cannabis in many ways, but it was a white powder and it had never been in contact with anything that had to do with cannabis. That fascinated me, somehow—because it triggered the same receptors in the body as cannabis. At the same time, the dosage was so insanely small, making it so cheap. In addition, you could order it from the

web without any risk. You know, it was all these factors ... it was so accessible, and there was so little risk when trading it. It was just so easy.

When claiming that “*it was just so easy*”, Lars emphasized the practical aspects of the synthetic cannabinoid market and its consumer-friendly format. However, Lars’ views about the drug were contested on the forum. Eric, another of the forum members interviewed, recollected his impression of the online debate, claiming that “*some thought it was okay, but others hated it. You know, it was such a fanboy war*”.

These conflicting views exemplified the social nature of the forum, which progressed through debates among members. The ambivalence directed towards the new drugs, of which the members debated the pros and cons, was also attributable to a burgeoning number of users experiencing and sharing the negative effects of synthetic cannabinoids. Similar to Agar and Reisinger’s (2004) theory, the original story was contested over time, with both positive and negative stories circulating. At first, stories were more likely to be positive than negative, but with time, the balance changed, and negative stories predominated (Agar & Wilson, 2002). Because of the synthetic cannabinoids’ highly potent effects and low dosages, users were prone to overdoses, resulting in what they described as frightening bad trips, which they in turn shared with the online community for others to read. This fuelled a debate about the initial attractiveness of the drug.

### **The “heroin of cannabis”: Bad trips and community rejection**

The online discourse related to synthetic cannabinoid use shifted over time from the curious and inquisitive posts that dominated around 2007. In recent times, a large number of users shared frightening experiences and warned others from experimenting with such drugs. This forum member posted a lengthy report in April 2013, describing how he overdosed and had a bad trip on synthetic cannabinoids.

(...) Just after I'd sent the joint on to my friend, I began bad tripping. It was completely insane. I freaked out and shouted that I was going to die, and shook and kicked around me. I was so fucking gone, suddenly I imagined that I had ended up in a perpetual psychosis where I died over and over again (...). Suddenly my mom called. I answered the phone instantly and shouted at her: "I'M DYING, I'M GOING TO DIE NOW!" (...).

The trip report was written in a dramatic tone, and the thread starter received a lot of support from other members who had experienced similar bad trips. They replied with concern, offering advice on how to avoid bad trips. This member posted his support just minutes later.

I recognize myself in your story. Synthetic cannabinoids are shit. You can crash so damn hard if you are careless. It's absolutely hellish; I feel for you. If you take too much, you will be totally belligerent, and you will do almost anything to get out of it (...). It's important to be damn careful and always smoke joints. Take it easy, and don't puff until your face goes blue. Don't use a pipe or a bong, as it can accumulate lots of concentrated stuff at the bottom (...).

The reply demonstrates the level of support between the forum members. The member offering his support even expressed an emotional bond when writing: "*I feel for you*" and hinted at his own negative experience with the drug when he wrote: "*I recognize myself in your story*". He then offered his advice on how to avoid future bad trips, not only offering his support but also helping to build the communal knowledge for others to read.

However, others were less supportive when members shared their experiences of negative effects with synthetic cannabinoids. This was because of the communal representations of synthetic cannabinoid use. The growing number of negative reports and members' own bad trips on the drug shaped the views of the drug in a negative fashion. The online

representations of the drug shifted towards descriptions of an unattractive drug, and forum members blamed those experiencing bad trips for being careless in choosing to experiment with such an unstable and unattractive drug. This member followed the above discussion, arguing that: *“Synthetic is crap no matter what, stay away from it. Lots of my friends used it a while ago, but now everyone has understood that it isn’t any good, thankfully. No one I’ve ever talked to has had positive experiences with synthetic cannabinoids.”* In writing this, the member offered no support, underlining that by now, everyone should be sufficiently informed of its negative effects that they should refrain from using it. Typically, these responses were followed by members promoting the use of cannabis instead of synthetic cannabinoids. Simon, one of the interviewees, recollected the shifting online discourse related to the use of synthetic cannabinoids.

You know, people have experimented with it and found that it’s not something they want. And those who want it, of course, they will surely have it, but I do not think it’s going to be something big. It’s simply not that cool. It doesn’t have that appeal.

In contrast to the positive online reports that dominated the forum when the drugs first hit the market, the descriptions given by users during recent years have shifted dramatically towards negative reviews and members encouraging others to refrain from using it, often fuelling a debate over the effects of synthetic cannabinoids and natural cannabis. Those who still used the former and those interested in trying it were usually persuaded to find good quality marijuana instead, with members also noting the lack of positive effects when smoking synthetic cannabinoids compared with organic cannabis—evaluating the latter most favourably. Lars, one of the interviewees, explained how he perceived the difference.

I stopped using it [a synthetic cannabinoid] fairly quickly because I didn’t like it. The effects are almost the same [as those of cannabis]; it works on the same receptors, but there

is something missing. Also bear in mind that you really don't know what kind of substances you're using. I don't want to destroy my own psyche (...). Cannabis gives a really warm and pleasant effect, you feel happy and so on. The synthetic cannabinoids lack that kind of euphoria, and they feel awfully heavy. To me, it's like the heroin of cannabis, if you know what I mean. You totally disappear into your own world.

Lars evaluated the synthetic cannabinoids as a less favourable drug. Describing them as "*the heroin of cannabis*", he clearly retained organic cannabis as his drug of choice and downplayed the attractiveness of the synthetics. These contrasting views also resonated at the forum, where several members, presenting themselves as experienced cannabis users, denigrated the use of synthetic cannabinoids and warned others from using them.

I would rather smoke heroin. You might not have smoked heroin. No? Most don't want to try it because we know how dangerous it can be. However, we know very little about these new psychoactive substances, but it is quite clear to me that when you can get several hundred doses out of one gram, it is not something I would want to try. This is dangerous stuff and cannot be compared with cannabis. If it is cannabis you are looking for, then you have no reason to try these new drugs with the misleading name "synthetic cannabis".

This post exemplifies the shifting discourse related to the use of synthetic cannabinoids. Not only did this forum member challenge the drug as a substitute for cannabis but also he made claims based on the collective efforts of the community. By using the term "*we*", he actively presented himself as a spokesperson for the community, urging the newcomer to stay away from the drugs based on the communal knowledge that had evolved over time from the collective efforts of the forum members.

From the seven-year period in which data were collected, the end result was a communal rejection by the forum members. Synthetic cannabinoids earned a negative reputation based

on their highly unstable effects and the likelihood of overdosing. Similar descriptions were also found in a global study of nearly 15,000 synthetic cannabinoid users conducted in 2011. Among the respondents, natural cannabis was preferred by 93%, and synthetic cannabinoids were associated with more negative effects, hang-over effects, and greater paranoia (Winstock & Barratt, 2013). The initial attractiveness of synthetic cannabinoids appears to have undergone a user-driven change, where the result of anonymous communication between users on the Internet leads to a change in the discourse related to the use of synthetic cannabinoids, possibly deterring others from experimenting with them.

## **Discussion**

This study shows how the online discourse related to synthetic cannabinoid use has changed over time. From the positive and inquisitive posts that dominated the forum when the drug first hit the Norwegian market, the tone has now shifted, with forum members sharing dramatic and frightening bad trips as well as encouraging others to refrain from experimenting with the drugs. Interviews with forum members also revealed how their use of drugs was largely influenced by the information that they gathered from users online. The online reviews served as a starting point for drugs of which they had no knowledge, and by reading other forum members' experiences, the interviewees were informed about their intoxicating effects and became tempted when reading positive trip reports. In this way, the trip reports served as a powerful marketing channel for the drug, especially when the reviews were positive. However, the interviewees were also influenced by the changing discourse related to the use of synthetic cannabinoids, and the increasingly negative publicity coloured their view of the

substance, making it an unattractive drug alternative. This perception was also fuelled by their own negative experiences.

Participation in online drug communities influences knowledge of, associations with, and understanding of drugs. The primary goal of such communities is not merely to learn but also to solve problems, to develop new thoughts, and to advance communal knowledge (Paavola, Lipponen, & Hakkarainen, 2002). These needs are met by members contributing to the joint project, which is to form an information base about drug use built upon their experiences, made freely available for others to study. Viewing learning as a process whereby knowledge is created through the transformation of experience (Kolb, 2014), online discourse is a relevant case, whereas inquiry typically emerges from discourse (Bereiter, 2005)—that is, the social realities that people enter into and use in conducting their everyday activities and interactions (Miller & Fox, 2004). In this way, evolving online discourse encapsulates the ways in which social reality is always under construction; members continually assemble and use the interactional and interpretive resources provided by social settings to construct and change social realities (Miller & Fox, 2004). The design of such online platforms provides the framework in which individual and collective learning takes place and knowledge is built (Hemetsberger & Reinhardt, 2006), thus showing the process that helps members to exploit and to explore online community knowledge, and the ways in which it is challenged and evolves over time.

The evolving discourse related to the use of synthetic cannabinoids and the dynamics of good and bad stories revealed how members of the online community co-operated in shaping attitudes towards the use of the drugs. In the beginning, a communal “buzz” was created, generating more users who experimented with the drugs, and they in turn shared their experiences with others via the forum. The drugs’ reputation was therefore a result of the shared experiences of the users. However, in the following years, the balance changed,

creating more ambivalence in the representations of synthetic cannabinoid use. According to the “narrative mechanisms”, a drug’s reputation usually shifts in a negative direction when use becomes more widespread and the side effects become well known (Agar & Reisinger, 2004; Agar & Wilson, 2002). This intermediate phase, with conflicting and more negative views regarding the use of synthetic cannabinoids, resulted in a community rejection where the negative effects outweighed the positive. This process exemplifies the possible deterrent effect of the online drug community, where the discourse entailed a way of managing and reducing the risks associated with drug use. The recognition that both positive and negative stories about drug use circulate among drug users (Agar & Wilson, 2002), as well as the greater credibility of these stories in the drug-use milieu (Agar & Wilson, 2002; Sumnall et al., 2011), highlights the importance of such user-derived social spaces in the digital world in which we now live.

The evolving discourse of synthetic cannabinoid use displays the communal process in which members co-operated in the exchange of an extensive and cumulative body of knowledge, and the way in which this evolving discourse influenced members of the forum in their views and representations of the drugs. Online communities may be viewed as a medium for cultural transactions. Such sites serve to order, guide, and direct the behaviour of a particular society or group (Kozinets, 2010). Thus, the online content that users helped to produce contributed to a communal or cultural discourse that greatly influenced members’ choice of drugs and their use of them. This narrative mechanism, made possible by an interconnected web of virtual ties, maps out a new understanding of the way in which we relate to the development of new and emerging drug trends. As such, these online communities play a pivotal role for a new generation of drug users attempting to orient themselves in an ever-changing and innovative drug market, and should therefore have implications for future harm reductions strategies and health policy.



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