

Users' experiences of cathinones sold in head shops and online

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Abstract

Objective: We describe use and effects of head shop powders among opiate dependant polydrug users and recreational drug users. These powders contain cathinones and were sold as bath salts or plant food via the internet or in head shops.

Method: As this is a relatively new phenomenon, a qualitative approach using three data sources, in-depth interviews, a focus group (containing 10 opiate users) and a head shop website containing 49 product reviews, was employed. Themes were identified.

Results: According to the study population, these powders mimic the effects of cocaine, ecstasy and amphetamines. These substances were snorted, ingested or injected by people and were not used as bath salts or plant food. The users' experience indicates that these powders have the potential for dependence, and exhibit side effects such as insomnia, anxiety and other mental health effects. The users report that the effects of the substances vary over time indicating that the chemical contents of the powders may change.

Conclusion: Though users' descriptions of effects varied, there were indications of health and dependency effects which were more severe and more common among problematic opiate users, who also experienced increased social vulnerability. In general the recreational drug users considered their side effects to be mild and worth the drug induced experience.

Key words: Problem opiate users; Recreational drug users; Psychoactive substance; Cathinones; Head shop.

Introduction

We describe use and effects of head shop powders among two distinct population groups: i) polydrug users with a history of opiate dependence and ii) recreational drug users. These powders mimic cocaine, ecstasy and amphetamines. For the first half of 2010 they were sold as bath salts or plant

food via the internet or in retail outlets known as head shops. Trade names include Blow (mephedrone), CRAIC (methyllone), Diablos XXX (mephedrone), Doves (mephedrone, butylone and MDPV), Hurricane Charlie (MDPV or butylone), Mint Mania (methyllone), Recharge (mephedrone), Wild Cat, Snow (MDPV) and Summer Daze (butylone); their price was between €25 and €40 per gram or per five capsules.

Labelling of these substances in Ireland and the UK contained the warning 'not for human consumption' as the UK Medicines Act prohibited the sale for human consumption of some cathinones. Samples of these powders have been tested and found to contain synthetic cathinones, such as butylone, flephedrone, mephedrone (amphetamine like structure) and methyllone (closely related to MDMA).^{1,2} Cathinone is an alkaloid found in the shrub *Cata edulis* (Khat) and is chemically similar to ephedrine.³ The cathinones used in head shop products are synthetic extracts.

The use of these drugs can induce anxiety and paranoia. Reports say that their use can become compulsive and can create a state of psychological dependence. Mephedrone was linked to one death in Sweden in 2008. Denmark, Estonia, Finland, Germany, Hungary, Netherlands, Norway, Romania and Sweden have introduced legislation to regulate the production, sale or supply, and possession of cathinones.⁴ On May 11, 2010, the Minister for Health (in Ireland) announced that a number of chemicals contained in head shop products would be controlled under the Misuse of Drugs Act. The substances included six named cathinones.⁵

Methods

As this is a relatively new phenomenon, a qualitative approach using three data sources was employed. In early 2010, one of the authors completed in-depth interviews with four people who purchased head shop powders. Three were homeless polydrug users living in a hostel in Dublin. The other was a middle class recreational drug user who previously snorted cocaine. Each participant consented in writing to the interview. Interviews were recorded and transcribed. In addition, UISCE (Union for Improved Services Communication and Education) conducted a focus group with 10 intravenous opiate users who used head shop powders and lived in Ireland.

The group was facilitated by an experienced moderator and a second person documented verbatim quotes and observations. In order to examine the use and effects among a reasonable number of recreational users; 49 customer reviews of the product Snow posted on an Irish head shop website between March and December 2009 were downloaded and analysed.

All data was analysed using QSR NVivo 2.0. A simple coding frame was developed based on the topic guides. Data

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represented by each code were summarised. The emerging themes are presented in this paper.

Results

Types of powders

The four people interviewed in-depth reported use of a variety of powders including Blow, Blow Out, Charge, Craic, Hurricane Charlie, Snow, and Vanilla Sky. The 10 focus group participants used Snow, Hurricane Charlie, Vanilla Sky and Wild Cat. The 49 who recorded their experiences on a head shop website used Snow.

The participants interviewed in-depth reported that the powders were similar to cocaine and ecstasy. Some reported that these powders were cheaper than cocaine and easier to access.

'It's a bit like coke, it's a bit like ecstasy... it's just, ...a nice buzz that's all I can say' (Blow)

'Same effect as ecstasy,... gradual build up. Eyes rolling, jaws clenching.' (Snow).

The website reviewers reported that Snow was like cocaine, ecstasy and amphetamine.

'Slight MDMA [but] more coke buzz off it' (Snow)

'I'm not into speed so that's why I don't like it., Very amphetamine-y but not the clean type' (Snow)

Problem opiate users injected cathinone powders while recreational users snorted the powders.

No participant mentioned using the powders as bath salts or plant food. The 10 focus group participants, who were intravenous opiate users, injected the head shop powders which they said easily dissolved in water. Two of the three homeless polydrug users interviewed in-depth reported that they had injected Blow or Snow in small quantities several times per day and the fourth, a recreational user, snorted or swallowed it wrapped in a cigarette paper. Where the website reviewers documented a method of use, they reported that they snorted Snow. None of the reviewers mentioned eating or injecting the powder.

Frequency of use varied

At the time of the in-depth interviews, one of the interview respondents used the powders on an occasional basis, two of the respondents used them on a daily basis and one respondent had not used them for more than two months.

Expected effects: buzz, high or euphoria

When asked about the effects of the powders, the four people interviewed in-depth reported that they experienced a high or buzz from using head shop powders such as Snow or Blow. The three heroin users did not report a reduction in heroin use since using head shop powders. The participants who attended the focus group also described a feeling of euphoria or an energising high, an increased desire to talk and a reduced need for sleep.

'Great, full of energy. Can't sleep'

'It's just a euphoric effect'

'The effects are you get a high buzz. You feel relaxed and you feel nice'

'Real chatty buzz'

Two of the four participants interviewed said the high from the head shop powders lasted longer than that from cocaine or ecstasy. Most of the focus group respondents said that the immediate intense buzz or high lasted around 20 to 30 minutes and this was followed by a less intense but long

lasting effect.

'It's exactly like coke, but it lasts longer and it's cheaper' (Snow).

Of the 49 reviews recorded on the website, 41 were satisfied with Snow. Many of these reviewers said that the powder elevated their mood and made them very talkative.

'Had a good portion of a gram when I was out on a session. Brilliant. Was going nuts and couldn't stop talking. Really sociable.'

'The effect was immediate and of course, loving it, I continued to top myself up which only resulted in a major buzz which left me reeling from the adrenaline.'

'It is a great legal high! Almost like the real thing! Has instant effects; which only get stronger! I would love to go to a club where everyone on it!'

Eight reviews indicated that they were dissatisfied with the product because it had no effect or the effect was too strong.

'I found it quite boring, felt a little tingle but that was it, would rather spend my 30 euro on 6 pints instead. I'm not even a regular user due to my job, but by god it burns your nose and gives you about a 3 pints buzz'

'Do not take Snow XXX dangerous ... stuff, awful come-down, needs to be watched, this stuff has something wrong with it!'

Unexpected effects: addictive, difficult come down, unable to sleep, withdrawal symptoms, mental health effects

One of the four participants interviewed reported that he could no longer control the use of these powders and another participant started using Blow or Snow at weekends and then daily indicating compulsive use and possible dependence. Many reviewers commented that after the initial high began to wear off, they would take another dose.

'It's mad addictive! We got half a gram not expecting a mad one! Drank two bottles of vodka between the two of us and went down in a taxi at 9am the next morning to get a[nother] gram.'

According to some website reviewers, the higher the amount of powder consumed the more side effects experienced. The side effects experienced included stinging nasal passages, palpitations, sweating, insomnia, anxiety and nausea. Side effects were generally considered 'worth it'.

The after effects of the powers varied. Some focus group members mentioned experiencing a 'come down' similar to that experienced after taking cocaine. Others said they did not experience a 'comedown', but felt a bit 'snappy', 'with-drawn' or 'low' the following day, and this prompted them to take another dose of Snow.

'Horrible down, depressed'

'No come down. Friends said I was snappy. No paranoia'

Most of website reviewers experienced an after effect and the main after effect experienced was inability to sleep. Some reviewers reported symptoms of a hangover.

'High lasted about 30 mins for me and then things just get edgy, made me feel dodgy. Anxious kind of buzz and hard to sleep.'

'Heavy insomnia afterwards, took at least 8 hours to get asleep. While doing it I was a mess, couldn't string a sentence together, started to stutter but couldn't stop talking, heart palpitations, sweats'

'Did about 0.6g. Lasts pretty long 5-6 hours. Peaks in about 40 min-1h. I now think that I should have done half the amount as hangover was bad'

One of the respondents interviewed in-depth reported depression and suicidal thoughts. The other three did not report any negative mental health effects. Two of the three staying in emergency hostels lost their places; one due to chaotic drug use and littering with drug paraphernalia and the other due to an inability to pay for his room. One of the focus group members said her use of the substances had destabilised her drug use to the extent that she stopped attending her clinic for the treatment of her opiate use. One of the four interviewed said that Blow or Snow helped deal with withdrawals from heroin and another interviewee used heroin to ease the come down associated with Snow or Blow.

'I do the snow and then I have the heroin to come down.'

One of the respondents recalled that when he had stopped using head shop powders following three months of continued use, he experienced what he considered withdrawal symptoms for three days.

Evolving substances: effects differ over time

Several website reviewers indicated that the contents of the substance changed over time. Some complained that it was stronger and others said that it was not as strong as previous versions.

'The old stuff was clean, had a great dance, chatty then headed off to bed at 5am and had a lovely sleep. No hangover the next day and ready for breakfast.'

'Very similar to the old crazy snow from months ago. Be careful though!'

'What's the story? Did it get stronger or what? Coz I've done it before, a load of times, but mad to come down off.'

Lack of regulation

The focus group participants and individual interview participants emphasised the lack of regulation on the sales of the substances, the lack of information on ingredients and side effects.

'Cheap party drug. I would like to know what the stuff is? What are the side effects?'

'I've heard of a few stories...People don't know what ingredients, people don't know the effects of this drug yet.'

Discussion

We describe the use and effects of head shop powders among dependent opiate users and recreational drug users. We establish that the effects of these powders mimic cocaine, ecstasy and amphetamines. We determine that these substances are snorted, ingested or injected by people and not used as bath salts or plant food.

The users' experience indicates that these powders: have the potential for dependence, and exhibit side-effects such as insomnia, anxiety and other mental health effects. The users report that the effects of the substances vary overtime indicating that the contents of the powders packaged identically may change. Though experiences and opinions among the study population vary, there is some consensus on the need for more information about the substances and their potential effects.

The head shop reviews would be more likely to contain the more extreme positive and negative experiences. The data explore the experience of a relatively small number of users

and does not provide us with the prevalence of head shop powder use in the population. The interviewed users are mainly polydrug users with a history of opiate dependence. The Drug Treatment Centre Board reported that use of head shop powders is relatively common among drug users attending treatment for opiate dependence with 29 (13.9%) of 209 samples tested being positive for Mephedrone, 7 (3.3%) positive for Methylone and 1 (0.5%) positive for BZP.⁶

The study population reported both physical and mental health effects of head shop powders and these effects are supported by information from health agencies in Ireland. Harm reduction agencies and emergency departments say that a small number of cases attended with cellulitis, abscess and deep venous thrombosis as a result of injecting head shop powders.⁷ Anecdotal reports from harm reduction agencies reveal that a small number of their clients (who reported that they had taken head shop powders) exhibited personality changes such as aggression, depression and paranoia.

A Dublin emergency department state that two cases attended with symptoms of suicidal ideation and one case attended who jumped from a height and sustained lower limb fractures; all three cases reported that they took powders known to contain mephedrone.⁸ In mid-August 2009, the Irish Medicines Board received an adverse reaction report associated with recreational use of a product called Charge Plus. The patient was admitted to a psychiatric unit with symptoms of acute psychosis.⁹ In Sweden, mephedrone was banned after a young woman died as a result of consuming it.¹⁰ In the UK, preliminary reports indicate that two young men died following mephedrone use.¹¹ In Ireland a coroner has warned young people of the dangers of head-shop drugs after mephedrone and butylone were linked to the death of a student.¹²

The study population with a history opiate dependence reported that the use of these powders destabilised their treatment or resulted in the loss of accommodation. Some of them reported dependence, mental health and withdrawal effects. Many of them injected the powders which raises public health concerns associated with skin infections and transmission of blood-borne viral infections. The use of these substances by such drug users increases their risk of acquiring blood-borne viruses and social vulnerability.

As mentioned, the effects of the powders varied over time indicating that the contents are not be standardised. The national laboratories report that they have found different psychoactive ingredients in powders that were in identical packaging.¹³ The laboratories also note that many head shops do not list all ingredients contained in the powders.

The Minister for Health (in Ireland) controlled six named cathinones under the Misuse of Drugs Act in May 2010. The Criminal Justice (Psychoactive Substances) Act 2010 (No. 22 of 2010) came into operation on Monday 23, August 2010. The intention of this Act is to prevent the misuse of dangerous or otherwise harmful psychoactive substances by making it an offence to sell, import, export or advertise such psychoactive substances.

Some argue that a ban will mean that new alternatives will be developed or that the sale of these products will go underground. Others are in favour of a ban because of the possible or probable health risks associated with the use of these powders.

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Declaration of Interest: None.

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