

Benzodiazepines and their links to UK youth culture

Benzodiazepines, also known as 'benzos', 'Blues', 'BZDs', exist today in about 20 different forms. The first benzodiazepine was synthesised in 1955 by the Hoffman-La Roche laboratory [1]; within decades becoming one of the most prescribed drugs in the world. Around 16 million prescriptions for benzos are issued yearly in the UK [2], and the UK is also the second-largest buyer of Xanax (a type of benzo) from the dark web [3]. We will discuss benzo pharmacology, the harms associated with their misuse, and potential reasons for benzo abuse with young people in the UK. We will then introduce the Benzo Research Project, a project working to highlight the voices of those who have experiences with non-prescribed benzo use.

Pharmacology of benzodiazepines

Pharmacologically, benzos belong to a class of CNS depressant drugs and are used as hypnotics and anxiolytics, meaning they induce feelings of calm, drowsiness or sleep. This gives them high potential as prescription therapeutics for anxiety, insomnia and other psychological illnesses such as panic disorders. They are also used in the treatment of epilepsy as an anticonvulsant [4]. Today, around 20 benzos exist, and the most commonly prescribed include diazepam, alprazolam, lorazepam and clonazepam. These are known commercially as Valium, Xanax, Ativan and Klonopin, respectively. [5]

How do they affect the body?

The actions of benzos on the body are categorised into 5 main effects:

1. Hypnotic (causing sleepiness);
2. Anxiolytic (minimising feelings of anxiety/producing relaxation);
3. Anti-seizure (decreasing the probability of having seizures and convulsions);
4. Muscle relaxant (reducing muscle tension and pain);
5. Amnesic (disrupting long and short-term memory).

Benzos work by enhancing a crucial inhibitory neurotransmitter in the brain, called GABA (gamma-aminobutyric acid). GABA reduces the excitability of neuronal cells, functioning as a sort of 'brake' for our nervous system. Benzos' mechanism of action is to enhance this 'brake' signal produced by GABA, therefore enhancing its quietening influence on the brain. This can often become excessive [4].

Harmful side effects

It is well documented that long-term benzo usage causes memory and cognitive functioning impairments. Evidence suggests that acquisition of new information and episodic memory (memory of everyday events such as times, locations or dates) are damaged by benzo usage, but it is unclear whether this is related to the drug's sedative effect or separate from it. These memory defects can lead to dangerous amnesic episodes or blackouts, potentially lasting many hours after ingesting the drug. Some research has reported impairments in visuospatial and attention ability in patients taking benzos for a year or longer.

Benzos can also cause a phenomenon referred to as "emotional anaesthesia", or "emotional blunting," in which the drug user's ability to experience powerful emotions is lacking. This is described as "the inability to feel pleasure or pain" within the medical literature and has similarities to the anhedonia experienced by depressed patients. Long-term benzo misusers have often articulated their experiences as a sense of "sleepwalking through life" [5]

Due to the potentially detrimental cognitive, neurological, and physiological effects of long-term use of benzos, as well as concerns raised by medical professionals regarding the addictiveness of these drugs, the British National Formulary recommends their use strictly for short-term treatment. This means no longer than 4 weeks of uninterrupted use. Benzos carry an extreme risk of psychological and physical dependency, with gruelling withdrawals reported as lasting up to 3 years [2]. Drug deaths from benzos rose by 19% between 2019 and 2020, accounting for 10% of all deaths from drug poisoning in 2020 (Office for National Statistics, 2021). Thus, it is evident that benzo abuse can have tragic consequences and, at best, impact victims' relationships, careers, financial stability and self-growth.

Benzos and young people

Despite the risks, the popularity of benzos is increasing among British youths, with concerningly young individuals misusing the drug. A Vice survey via Snapchat reported that 35% of respondents, estimated to be 13-24 years old, knew at least one friend taking Xanax [6]. Within the UK, benzo use among school children has risen, with 1.7% of English 15-year-olds reporting having tried tranquilliser drugs, consistent with the reported increased usage of alprazolam in school-age children [7]. The number of young people reporting a benzo problem to drugs and alcohol services has been increasing since 2016, with the number of people seeking help for benzos being 5 times what it was in 2014 [8].

There are several potential reasons for this rise in popularity. A facade of safety due to their status as a prescription medicine places a false sense of harmlessness around benzos. On having their addiction and abuse exposed to their parents, some teens have reported them being unfazed due to the drug's perceived safety [9]. Additionally, teens can easily obtain them at a cheap cost (as little as £1 per pill online), and there is unlimited accessibility through anonymous websites which even offer next-day delivery.

The recent pandemic, having brought with it a plethora of lockdowns, restrictions and cancellations of A-Levels and GCSEs, has exacerbated the mental health issues experienced by today's youth, bringing about a collective aura of despair in young people's attitudes today. Perhaps a spiral of benzo misuse thought to be restricted to the USA, was able to thrive in the UK and Europe through latching onto this vulnerable demographic of young people. This created the perfect storm for a highly addictive, easily accessible prescription drug to amass a surge in misuse.

Post pandemic, past stigmatisation of mental health and anxiety has transformed into an era in which self-care and mental health is celebrated. Mental health awareness has never been this

profound, and although there are benefits from this increased awareness, the fact that young people might be better able to spot symptoms of psychological disorders has possibly contributed to self-medication tactics resulting in benzo misuse. Benzos may be seen by school and university-age students as a silent salvation, self-medication providing a coping mechanism that allows them to avoid engaging in difficult conversations with parents or those around them, one that is instant and doesn't require the wait times of up to 16 months for university or NHS mental health services [10]. The unlimited and anonymous access to benzos and other recreational drugs via the internet have made using and accessing benzos more effortless than ever for teens and young adults.

Nonetheless, mental health de-stigmatization is hardly a scapegoat for the benzo epidemic amongst UK youth; the small body of research shows that the underlying causes for the rise of benzos are complex. This might also be underpinned by the current state of social media, celebrity, music and pop culture. In an age of 'hyper fame', celebrities and artists in the spotlight have unprecedented and subconscious influence. Consequently, the music industry and rap subculture have the potential for an immense impact on the integration of benzos in youth culture today.

Many decades have been hallmarked by drugs that seem to infiltrate their music scene; LSD and heroin were illustrative of the hippy 60s and 70s, cocaine branded the grunge 80s and 90s, whilst prescription medicines and opioids mark the music and pop culture of the 2010s ensuing the opioid crisis and war on drugs in the USA.

The music itself mirrors these changes. The glorification of Xanax by Hip Hop and RnB artists, frequently featured in song lyrics, indicates an association of benzos and other prescription drugs with various music genres, namely 'mumble rap' and 'SoundCloud rap'. Within the UK, similar links are found with drum and bass and garage music scenes. This is evident in the dazy and slow-paced feel of Mumble or Soundcloud rap, with 'Subdued bass and spaced-out drums' mimicking the effects of the drugs they mention misusing. Benzos like Xanax are evidently influencing their work. Opioids and benzos were once considered the vice of anxiety-ridden housewives, but the presence and romanticisation of benzos in modern music subcultures such as Rap and Hip Hop have caused a transformation of their image, spreading misuse beyond America and to 15 to 25-year-olds across the Atlantic.

For a generation that is more involved in pop culture, more anxious, more likely to experience mental illness and self-medicate than ever, the risk of benzodiazepine abuse is extreme. High-profile artists have catalysed the rise of benzos, perpetuating them as a suitable coping mechanism for today's youth.

Glamorisation of drug use is not new to youth generations of the past, so why has it brought about such an adverse and wide-reaching impact on youth now? The internet and social media are inextricable from the lives of British youth, contributing to easily accessible illegal drug markets online as well as a more substantial influence by celebrities. As we are able to follow

their every move, including the clothes they wear, the music they produce or listen to, and, in this case, the drugs they take.

Data on youth drug use in the UK is scarce. However, we can look to counterparts in the USA for ideas on patterns of drug use among young people. In the USA, young adults aged 18-29 report the highest rates of benzo misuse. A study in the USA investigating benzodiazepine dependence among young adults participating in the club and rave scenes showed that 47.7% of participants recruited directly within clubs had used benzos in the past month [11]. Authors of this study noted that participants in club and rave culture were more likely to engage in polydrug use, taking multiple substances in hopes of increasing intensity of intoxication, to come down from other stimulant drugs or to mimic effects of a drug they couldn't acquire. With benzos, this is particularly hazardous due to their potentially fatal interactions with alcohol or other depressant drugs.

The same study has found that the age at which people first try benzos is extremely young, which has also been noted in the UK [11]. The average age of initiation of dependent benzo misuse was 16 years old, and 10% of American high schoolers were found to have been exposed to benzos, with non-medical use being the most prevalent.

Although young people involved in the club, rave and associated music subcultures might comprise a key demographic of benzo misuse outside of prescription abusers, data suggests that the problem stems from before potential clubgoers would be legally allowed entry into clubs. Instead, benzo use seems to often start at school age.

Overall, it is clear that the most concerning aspect of the problem with benzos and UK youth is the age at which misuse begins, as well as the heavy influence of pop culture and music subcultures on young people. Benzos may be speaking directly to the anxiety-ridden, social media era youth of today, especially university and school-age students where stress, academic burnout and mental health concerns can be rife. Although many associate recreational drug misuse with the adolescent milestone of entering higher education, in the case of benzos, universities might instead be more complicit in failing to provide adequate support for those entering university with existing benzo misuse issues. It is clear that more often benzo abuse issues among young people stem from school age.

Despite this, no dedicated NHS services are currently offered to support people with a history of benzo misuse, and little expert advice exists on how to quit taking into account the dangers of going cold turkey on benzos. Those taking benzos long-term run the risk of seizures, comas, brain damage and other dangerous effects when quitting without tapering or weaning their dose [2].

We, the authors, are members of a student-led research project, The Benzo Research Project which aims to investigate further the reasons for benzo misuse in the UK, centring young voices in discussions about this issue.

This article has been written as part of a call to action by the Benzo Research Project to fill the gaps in our understanding of benzo use in the UK and make policymakers aware of the rising epidemic of benzo use in UK youth.

Benzo Research Project

The Benzo Research Project (BRP) is run by a team of students from across the UK, with the primary goal of understanding and evaluating the lived experiences of members of the UK's young adult population who take benzos recreationally or for other non-prescribed reasons.

The BRP wishes to create a space for those affected to vocalise their experiences (both positive and negative). Therefore, we built a story-sharing platform in collaboration with Drugs and Me, a drug education organisation. Young people who have taken non-medical benzos while 18-25 years old were invited to submit their anonymous testimonies to the platform, where they are now shared. (Read them at: www.drugsand.me/benzo-research-project/testimonies/)

We feel that young people's voices and stories are not centred in the conversation about non-prescribed benzo use and its consequences – our project seeks to change this. Through collecting and considering stories of lived experiences from young people, the BRP team hopes to provide an overview of the current situation of youth benzo recreational usage, evaluate the current support options for those struggling with benzo use, and better inform future harm reduction strategies.

Harm Reduction

The Benzo Research Project and our partners, Drugs and Me, are passionate about sharing evidence-based harm reduction methods. Here are some of our key takeaways with regards to reducing risk when taking benzos:

Tolerance

Benzos are highly addictive, and an individual's tolerance builds very fast. Withdrawal from high doses can be very painful, even life-threatening if not done in a controlled manner. It's imperative when taking benzos to stay at the same dosage to try and reduce the risk of increasing your tolerance. If you find your tolerance building to that dose, Drugs and Me suggest abstaining from using benzos for a few weeks.

Quitting

Withdrawal from benzos can take different amounts of time for each person, with varying types and severity of physical and psychological symptoms. Do not stop taking benzos suddenly. The safest way to withdraw from benzos is by tapering down the dose you are taking. We strongly suggest you do this with help from medical professionals.

Polysubstance use

Alcohol and benzos are both depressants with similar mechanisms and so increase each other's potential for harm, including risks for blackouts, heart problems or overdose. Mixing

benzos with opioids carries similar risks, with the added harm that benzos can reduce the effect of naloxone, an opioid overdose reversing drug. Mixing multiple CNS depressants also increases the risk of respiratory depression, as vital organs such as the brain and lungs are unable to obtain enough oxygen.

Antihistamines can increase some side effects of benzos, such as confusion and dizziness, which is something few people know, so they aren't looking out for these side effects.

Testing drugs

There are ways of testing benzos to confirm their authenticity. Drugs and Me have options on their website for tests for fentanyl contamination.

For more information on harm reduction, check out Drugs and Me's website: www.drugsand.me.

This article has aimed to inform and increase awareness of the often overlooked negative consequences of benzo misuse, and emphasise the powerful impact of raising awareness of the harms associated with it. This includes including risks of tolerance, quitting safely, counterfeit and contaminated with lethal substances, especially within the unique demographic of 18-25 year old youth. Following on this, we have explored that when analysing youth benzo usage, the crucial takeaway is understanding the point at which benzo use begins. Integral to the process of combating youth benzo misuse in the UK is initially deciphering benzo use behaviours on a social, cultural as well as pharmacological level. Policy makers and institutions must target the aforementioned key feature of misuse patterns (such as age of initial benzo use) when developing future intervention or harm reduction strategy. As such, focussing on educating parents or adopting school-based drug prevention programs might be most effective.

Benzo Research project partners



Scan to view testimonies

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