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"You Don't Feel" – The Experience of Youth Benzodiazepine Misuse in Ireland

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Abstract:

Background

There are many negative effects to inappropriate use of benzodiazepines, yet the percentage of young people in Ireland experimenting with benzodiazepines has increased. There is a paucity of research about why Irish young people ~~take~~ misuse benzodiazepines.

Method

Thirteen young people between 18 and 25 years attending substance misuse services in the south of Ireland were interviewed in a semi-structured style between June 2012 and April 2013. Content analysis was performed.

Results

The main motivations for benzodiazepine misuse were to self-regulate negative emotions and to induce dissociation from their environment. Interviewees also described the consequences of benzodiazepine misuse, such as disengagement from family relationships and other protective environments such as school and sports clubs. The consequences of chronic misuse were discussed such as the compulsion to take more benzodiazepines despite experiencing severe side-effects. The incidence of paradoxical aggression on benzodiazepines is also explored.

Conclusions

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Education about benzodiazepines and their risks to young people, families, and the public may reduce benzodiazepine misuse. Future research on the role of trauma and mental health in young people's substance misuse is required.

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"You Don't Feel" – The Experience of Youth Benzodiazepine Misuse in Ireland

Introduction

The most recent global benzodiazepine (BZD) usage estimate was that approximately 8.4 people per 1000 were consuming BZDs daily in 2009 (EMCDDA, 2013). Within this worldwide context, Europe had the highest level of BZD consumption for both anxiolytic BZDs and sedative/hypnotic BZDs between 2007 and 2009, according to a report by the International Narcotic Control Board (International Narcotics Control Board, 2011). Anxiolytics are long-acting BZDs, such as diazepam, used to treat anxiety, while sedative/hypnotics are short-acting BZDs, such as zolpidem, used to induce sleep. Anxiolytics in Europe were consumed by approximately 42 people per 1000, which contrasts with consumption levels of approximately 25 people per 1000 in the Americas and approximately 5 people per 1000 in Africa.

The high level of anxiolytic use in Europe reflects the high incidence of mental health problems. A recent study estimated that one-year incidence of mental health problems in Europe was approximately 38% (H. U. Wittchen et al., 2011). The one-year incidence of anxiety increased between 2005 and 2010 from 12.0% to 14.0%; the latter figure representing approximately 61.5 million people (H.-U. Wittchen & Jacobi, 2005). The increase in BZD consumption in Europe has been mirrored by an increase in the number of individuals seeking treatment for BZD misuse. Ireland has seen a sharp increase in the number of BZD misusers seeking treatment; there was an almost threefold increase between 2004 and 2010 (Bellerose, Carew, & Lyons, 2011; Reynolds, Fanagan, Bellerose, & long, 2008). The median age of first misuse (by new users of BZDs) fell from 20 years to 18 years in the last decade (Bellerose et al., 2011; Bellerose, Lyons, Carew, Walsh, & Long, 2010). This trend of earlier admission for BZD treatment corresponds to the trend of increasing misuse by young people. The percentage of 15 and 16 year-olds in Europe who had experimented with BZDs

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without a prescription between 2003 and 2011 increased from 2% to 3% (Bjorn Hibell et al., 2004; Björn Hibell et al., 2012).

There has been little research into describing the factors surrounding youth BZD consumption, particularly in Ireland. It is important to gain an understanding of the experiences of young people who take BZDs as misuse at this age may have detrimental cognitive effects to the person in the short term and the long term (Billioti de Gage et al., 2012; Boeuf-Cazou, Bongue, Ansiau, Marquie, & Lapeyre-Mestre, 2011). There also seems to be some evidence that these effects can continue after BZD misuse has ceased (Stewart, 2005). As well as cognitive effects, benzodiazepines also have social and physical effects. Physical effects include slurred speech, impaired motor co-ordination, and blurry vision (C. E. Griffin, A. M. Kaye, F. R. Bueno, & A. D. Kaye, 2013). However, it can have opposite effects; agitation, talkativeness, and possible violent behaviour, which can result in impaired relationships (Bramness, Skurtveit, & Mørland, 2006).

Young people who abuse substances can viewed along a continuum, with normal adolescent experimentation at one end and vulnerable children who have been exposed to early traumatic experiences at the other end. There is general consensus in the literature regarding risk factors for adolescent drug use; individual, family, community and educational (Apantaku-Olajide et al., 2015; Vakalahi, 2001). Studies have demonstrated that children who experience exposure to adverse or traumatic childhood experiences (ACEs) develop a range of negative health outcomes including poor mental health and addiction (Felitti et al., 1998; Heffernan et al., 2000). Addiction practitioners view addiction and mental health as a parallel process frequently linked to stressful or traumatic events and early developmental issues such as attachment difficulties and there is some empirical support for this, however more research is required and there is a clear gap between research and policy (Flores, 2001; Carruth & Burke, 2006; Hari, 2015). It is for this reason that it is a priority to understand the dynamics of BZD misuse so that evidence-based policies can be implemented to reduce the damage done to young people.

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The research question for this study is, how do young people conceptualise BZD misuse, and the aim of this study is to explore the experiences of young people who are high-dose benzodiazepine abusers to identify strategies that may be of value to clinicians or policy makers.

Method

Approach

Prior to commencement of the study ethical approval was sought and obtained from the [redacted]. Semi-structured interviews were chosen as the data collection method of choice, because it allows to maximise the depth of participant responses while allowing for a high level of standardisation between participants

Sampling

A purposive sampling strategy was chosen, substance misuse treatment centre counsellors and community drugs counsellors in Cork city, Ireland, were asked to act as gatekeepers for the recruitment of young people. It was decided to use the method by Francis *et al*. to determine when informational redundancy had been reached (Francis et al., 2010). Informational redundancy is reached when no new categories are identified in the final three consecutive interviews after an initial sample of 10 interviews. The inclusion criteria used in the selection of participants was that the interviewees used BZDs when they were aged less than 21 years of age or are currently using BZDs and are under 21 years of age, and attending treatment at a drug treatment centre. As they were attending drug treatment centres, they were referred by the police or by family members for regular, high-dose benzodiazepine use. Exclusion criteria were psychologically-vulnerable subjects or the presence of intellectually disability (as assessed by their gatekeeper, their counsellor). After the young person's regular session, their counsellor gave them a brief description of the study, and asked if they wanted to take part. It was emphasised that their decision would not affect their

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ongoing therapy in any way. Participants who agreed to take part were then given an information sheet with frequently asked questions about the interview process and contact details if the participant wished to contact the researcher afterwards. Interviews took place in the treatment service during the period of June 2012 to April 2013. Participants were asked to sign a consent form, and were asked to tick a box if they allowed quotes from the interview to be used anonymously. Of the 14 people who were approached, 13 people agreed to participate and one person declined to be interviewed. Interviewees comprised of 11 males and 2 females, all were between 18 and 21 years at the time of interview (see Table 1). All were attending addiction treatment with 11 attending outpatient treatment and 2 attending aftercare. Regarding time since last BZD use, 10 had used BZDs in the seven-days before interviewing and 2 had used BZDs in the 90-days before interviewing. Participants did not receive any compensation for agreeing to be interviewed.

Interview

Single semi-structured interviews were conducted in the treatment centre/community centre that the interviewees were attending, as this would be a safe, familiar environment. Interviewees had the option of conducting the interviews in the presence of their counsellor/drugs worker. This option was chosen by three of the interviewees. Interviewees were asked questions from a topic guide (see Appendix I) that was adapted from the topic guide of previous research into recreational BZD misuse (Peters et al., 2007). The topics were reviewed by all authors and a service user of the treatment centre and changes were made to ensure that the language used in the interview was appropriate. All interviews were recorded by a dictaphone (Sony ICD-P620), and interviews ranged from 6 minutes to 41 minutes with a mean time of 17 minutes. ~~The variation in interview times was primarily due to two factors. This was the primarily researcher's first study involving semi-structured interviews and thus may not have elicited all potential information from participants. The second and main factor was the hesitation of participants to speak to the researcher, a stranger, about past illicit activities.~~

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Analysis

Recordings were transcribed by [redacted], the transcript was checked against the original recording to familiarise the researcher with the sense of the interview. NVivo® software was used in the coding phase of analysis by [redacted]. Content analysis was chosen as the method of analysis because it is more appropriate in situations where previous studies in the area are lacking (Vaismoradi, Turunen, & Bondas, 2013)).Given that there is a dearth of previous studies outside of the U.S. specifically relating to adolescents this study was exploratory and nature and did not apply a theoretical framework. There are a number of theories explaining substance dependence such as the disease model and recently an increasing interest in the self-medication theory. Results will be analysed to determine where the data fits with the pre-existing models. Initial coding by [redacted] and independent coding of four randomly selected transcripts was performed by [redacted]. Both researchers met and minor discrepancies were discussed to reach consensus.

Findings

The content analysis revealed four categories each with their relevant themes. For the purposes of this article two categories will be discussed, see Table 2. The categories that emerged are ones that would be expected when investigating any illicit drug, however some findings have not been discussed in Irish youth BZD research previously. The two categories are Motivations and Consequences. The first category represents the starting phase of the cycle of BZD taking while the second category represents the final phase of the cycle. Together they represent the major user-related factors that influence whether a young person continues to take BZDs after the initial experimentation stage. Use after this initial stage can result in chronic use. These factors also influence the young person's overall positive or negative perception of benzodiazepines after a period of chronic use.

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Motivation to take BZDs

The motivations to take benzodiazepines are the main drivers for prolonged use, and can influence the characteristics of a young person's benzodiazepine experience, *e.g.* frequency of use, timing of use (socially, dealing with emotions *etc.*), benzodiazepine dose, and concomitant use of other substances. Motivation for BZD could be divided into two categories; the avoidance of negative emotions and the psychoactive effect. In relation to the former, participants identified BZDs as an effective method for the management of negative emotions, facilitating the numbing of distressing feelings. Participants also reported the enjoyment associated with the 'high' and the consequent feelings of confidence and invincibility.

Avoidance of negative emotions

Conflict in the young person's personal life was noted as a common reason for taking BZDs. It helped the young person to cope with negative emotions:

> *"I think that's one of the reasons as well why I take them, cos they get rid of every single problem you have." (YP10)*

> *"I started taking them when my Mam and Dad broke up. I started taking them and I was taking them f***ing everyday" (YP13)*

A common description of their reason for taking BZDs involves two words, feeling and caring. The interviewees wished to avoid these two emotions:

> "You don't feel, it's the best way to describe it. You don't feel anything **at all**…" (YP2)

> *"they give you…do you know they make you really stoned, when you first start out on them, you're stoned, and when you're stoned, you just don't really care what goes on around you, do you know?" (YP3)*

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Participants describe how the use of BZDs provide a useful coping strategy in the absence of the ability to integrate and regulate their emotions.

Positives of BZD misuse

A common description of the effects of BZDs is that it makes them stoned. Some use different words to describe the same effect: buzz, bang or chilled. There was usually no further description of being stoned, except that it involved a sense of intense relaxation.

> *"It was a good buzz like" (YP1)*

> *"I used to take them, handfuls of them and I'd get whatever kind of buzz I'd get off them. Different kind of buzz I used to get years ago. A handful I used to get stoned out of my head, but as time went on…handfuls of them wasn't doing much." (YP3)*

> *"If I wasn't smoking or drinking, just take sweets to get a bang off it." (YP4)*

> *"It kind of like being stoned really. Really relaxed, really calm." (YP8)*

Another commonly described positive effect of BZDs is the increase in self-confidence it gives the users:

> *"I don't know, it's hard to explain like, but you feel very good on them when you're taking them, do you know, you feel very good about yourself, and you feel like you could talk to anyone." (YP13)*

In some cases, the increase in confidence can lead to a sense of dissociation from things around them. This dissociation could be emotional, where the user doesn't feel a connection to any other person, or it can be physical where a user is immune to physical pain. While users reported these as

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positive experiences they ultimately had negative consequences, this sense of dissociation may also be a function of the attempt to self-medicate and requires further research.

"you don't really feel on them. Like I've punched walls, I've punched in windows and not felt it." (YP2)

"You think you're invincible, you don't care about anyone or anything." (YP3)

"You're untouchable, you can do what you want when you want." (YP9)

"It's just like, I was the king of the world like, I was made of steel." (YP12)

This is an unexpected reaction to a central nervous system depressant but the effect, known as a paradoxical effect, has been well-documented in scientific literature since the 1960s. (Mancuso, Tanzi, & Gabay, 2004)(Jones, Nielsen, Bruno, Frei, & Lubman, 2011).

Consequences of BZD misuse

The consequences of BZD misuse can negatively affect a young person directly and indirectly. The direct consequences can be thought of as the physical side effects of benzodiazepine use, regardless of whether it is used appropriately or not. The indirect consequences, however, are emotional and psychological. There also are the consequences that have longer-lasting effects than the direct consequences. These behavioural changes alter how the young person is perceived by others and can result in declining interactions with family members and friends and increasing interactions with the police and the courts. In this study participants detail the negative impacts that BZD use has had in a number of domains including educational, vocational, social and familial. All of these areas have been identified in the literature as strong protective factors in young people's lives and thus disengagement form these domains increases the likelihood of negative health outcomes.

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Effects on social functioning

BZDs were associated with decreased engagement with education and hobbies. School engagement and participation in sports are recognised as protective factors for non-substance misuse (Fletcher, Bonell, & Hargreaves, 2008; Kwan, Bobko, Faulkner, Donnelly, & Cairney, 2014). This research also showed that a positive teacher-student relationship can also confer a protective effect. Ireland's above average teacher-student ratio may impact on student engagement (OECD, 2015). Interviewees displayed reduced motivation to learn and appeared disengaged from their lessons:

"I gave up completely…I prefer to stay at home now and get stoned." (YP9)

*"I went to school, I just…depended on smoking joints at lunch, and looking at books was never on, never the case where, I'm looking at the book and I'm saying…I don't give a f*** about this…I just want to…I just want to smoke my joint and I want to take my sweets." (YP10)*

"Like when I was in school, I can't even kind of remember it. But in work, yeah with machines and all that definitely. You're just not, everything is pure slow." (YP11)

"I'd just...I didn't know what was on the board like. I was after doing it yesterday but I still don't remember what was on the board…" (YP12)

BZDs also affected the ability of interviewees to concentrate while in school or at work, which led to accidents or near-misses:

"…I was doing an apprenticeship in a mechanics, and I remember I went up, I fell into the engine of a car that was running, the timing belt was flying and all the cam belts were flying. My boss caught me and just pulled me up…" (YP7)

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"You're just not even thinking like properly like. I often nearly took off my finger there, and there's people in my class who took out eyes, with chisels getting stabbed in the eye. Another fella nearly took off his finger there over them." (YP11)

BZDs had an effect on interviewees' after-school hobbies. Students who had played sports spent less time playing:

*"Played every match, Friday, Saturday, and Sunday. Training twice a day like…The weed kind of took the drive and the sweets just f***ing blew it out of the park. Just dropped it into touch…I couldn't run as far as the bus stop now these days." (YP7)*

Effects on family life

The interviewees tried to hide their BZD misuse from their parents. Alcohol would often be a cover for their misuse:

"…I might drink when I'm taking them which is even worse again…That would be my excuse, that would be my way for my Dad not to catch me." (YP10)

"They had a hint like but I never got caught…never got caught like. When I got caught, they thought I was drinking." (YP11)

For one interviewee, hiding their BZDs around the house didn't work out as intended as after taking some, they forgot that they were trying to hide their misuse:

"Oh yeah, 100% trying to hide it from my family yeah. Now and again it would come to the...like after that month when I started doing like hiding in the kitchen...sure after I took the 1st four or five of them hiding, I was too, in a way, spaced out and I didn't even realise, I

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was like going into the front room and doing this and drinking and they were like saying it to me the next morning, you were doing stuff right in front of us" (YP12)

BZD-taking often created conflict in the family. This was often as a result of the effects of the BZDs themselves:

*"Just being kicked out of home. Just getting arrested out of my house all the time. My Mam would ring the Guards on me and s*** like that. Stupid things now boy, I suppose it wasn't stupid, but on my part it was stupid, and I didn't want to do them." (YP9)*

"I was telling people make me cups of tea, and then when they made me a cup of tea, I didn't want it, and why did you make me a cup of tea. I can do it myself. I was just creating war for myself like. "(YP12)

However there was also conflict which revealed more about family dynamics and BZDs were indirectly involved:

"My Mum was really mad. My parents are split up so my Dad doesn't really know too much like, but my Mum was really upset because she couldn't get any more of them for a month. She was pretty upset with that. And she was saying it was a bit stupid to be taking them for no reason like." (YP8)

This particular example shows an insight into the norms of BZD use in the household. The parenting behaviour of the interviewee's mother appears to demonstrate low levels of demandingness (she did not punish the interviewee) and low levels of responsiveness (she did not appear to show concern for her child, only that she did not have enough BZDs for the rest of the month).

Negatives of BZD misuse

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There were numerous negative effects that the users associated with BZD. The most prominently discussed negative effect was blacking out/memory loss due to BZD misuse:

"I've woke up on days…em…I've had people call me going just, yeah did you realise you were doing this last night, and I'm like going em what day's today." (YP2)

"…you could stab a fella and you don't know it the next day. You could wake and as I said your head is clear, you don't know what you're after doing." (YP10)

"They were just telling me the next day what was going on, but I can't even remember. I don't know, I can remember falling into a bonfire, you know what I mean [laughing]." (YP13)

The second most commonly talked about negative effect was lack of motor co-ordination. This came in two general forms. These forms were physical co-ordination and speech difficulties. The interviewees described their inability to keep upright after taking BZDs, even in circumstances that involved significant risk to themselves:

"You're sloppy and you're stumbling." (YP3)

"…I couldn't stand, I fell, I was falling, I fell into the bonfire 2 or 3 times…" (YP13)

Some interviewees spoke about how BZDs would have the opposite effect to what has been described previously. The BZDs can make a person more agitated, and prone to reacting more extremely. The young people associated this behaviour with the mix of alcohol and BZDs:

"There's…there's a lot of bad things about smarties. You know, they could, you could go in home and start breaking up your house." (YP10)

*"But a big f***ing kitchen blade like, the kitchen blade was bigger than a bottle of coke like. It was the drugs...the sweets you know, f***ing, you know." (YP7)*

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Other less frequently commented on negatives associated with BZDs were slurred speech, weight loss, reduced motivation, and clouded-thinking for long periods of time (C. Griffin, A. Kaye, F. R. Bueno, & A. Kaye, 2013).

Compulsive nature of misuse

A preponderance of interviewees spoke about the compulsion to take more BZDs. BZD consumption would begin with small quantities and would build up to larger quantities. The dependence-forming nature of benzodiazepines has been well-studied. Dependence and hence the compulsion to continue taking benzodiazepines has been observed after 6 weeks of prescription use (Royal College of Psychiatrists Public Education Editorial Board, 2013). If young people were taking doses above the maximum indicated use then dependence may occur sooner.

> *"Em, when I first started taking them, then I'd only take a few of them, like but, they got very addictive, you know. And I ended then taking kind of 30 or 40 a day like you know." (YP7)*

> *"It was more habit than anything else when I was taking them, because I was so used taking them. I was taking them every day…" (YP13)*

In many cases, the limit on BZD misuse was imposed on the user because of their inability to purchase more or the scarcity of supply in the area:

> *"We used to get like 30 of them for about €15 like, no matter what they were so. Even if you threw in a fiver and that's 10 like, so when you're stoned out of your head, you just keep taking them so it'd been 20s and 30s, boxes of Halcion, Upjohn 17's, D10's, D5's, everything." (YP9)*

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"So if you have €50, you're getting 50 of them and if you've found the right fella you've got 100 of them for €50. And like you try, you'd say you going to buy 100, you say, I'll keep these 50 for myself and I'll give these 50 to sell, at double the price. That is not going to happen like. As soon as you take one, then another one, then another one, another one, they're very addictive like." (YP12)

This final quote was explained in that the interviewee took BZDs with sufficient regularity that they did not wait until withdrawal symptoms appeared before taking the next tablets. The compulsive nature of their actions is clear when the interviewee does not state any reward or pleasure is derived from taking the BZDs.

Discussion

This study investigated the experiences of young BZD users in a treatment centre in the south of Ireland. The study discussed two categories; motivation to take BZDs, and consequences of BZDs. These are similar~~not unlike~~ categories as would be~~that you would~~ expected ~~to see~~ with any form of drug use, but~~what is interesting here is that~~ young interviewees make clear reference to the need to medicate to self-regulate negative emotions.

Participants reported ~~to~~ using BZDs ~~in an effort to~~to avoid negative emotions and daily stressors, *'you just don't feel' and 'they get rid of every single problem you have'*. These descriptions of BZD use bear a resemblance to the psychopathology postulate of the self-medication theory as first described by Khantzian in the 1980s. It posits that the "genesis of dependent substance use lies in the relief from distressing psychological symptoms that substances give" (Darke, 2013). This postulate concurs with ~~the responses of~~ many interviewees' responses, as borne out in the quotes above. In the case of BZDs, the theory predicts that BZDs are taken to ameliorate aggressive or intense affect. BZD use could also be accounted for by the Adverse Childhood Experiences (ACE), (Felitti et al., 1998). The association between ACEs~~adverse childhood events~~ and substance misuse

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behaviour may be due to impaired neuronal development. Emotional stress in childhood has been shown to stunt the maturation of emotional regulation and executive functioning (Pechtel & Pizzagalli, 2011).

This self-medicating is interesting as individuals experiencing anxiety disorders especially consider BZDs as effective due to their immediate effect and ability to be taken intermittently in response to the fluctuating nature of anxiety--induced experiences (Salzman, 1990). It is well--documented that adolescence is a particularly vulnerable time for the development of mental illness (Olfson, 2014) and addiction practitioners view addiction and mental health as a parallel process frequently linked to stressful or traumatic events and early developmental issues such as attachment difficulties. ~~and t~~There is some empirical support for this, however more research is required and there is a clear gap between research and policy (Flores, 2001; Carruth & Burke, 2006; Hari, 2015). Most mental health and addiction services operate in parallel and the need for specific dual diagnosis services is evident, such approaches can acknowledge and address the cyclical effect of psychological distress and self-medication and thus improve outcomes in treatment.

Themes relating to the service users perspectives of both the positive and negative effects of BZD use emerged. The positive aspects of use were primarily the feeling of being stoned and relaxed, however high-dose users also reported paradoxical effects including aggressiveness and these effects have been documented elsewhere (Jones et al., 2011). The majority of the participants also remarked on the compulsive and addictive nature of taking BZDs and this is well reported in the literature. This has resulted in many countries issuing guidelines for the prescribing of BZDs, for example, *Good Practice Guidelines for Clinicians* (Department of Health and Children, 2002) states:

> *"Benzodiazepines should be prescribed only for as long as necessary, aiming for the shortest possible time but no longer than 4 weeks".*

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Public education would have beneficial effects in increasing awareness of the effects of BZDs (Ballymun Youth Action Project, 2004). Such an educational campaign could publicise the negative effects as described by the interviewees. Memory loss, bodily clumsiness, speech difficulties, weight changes, and decreased motivation could all show the unattractive side of BZD misuse. The longer-term consequences of BZD misuse can have life-long effects and in some cases lead to death. In 2014 in Ireland, there were almost two drug related deaths per day and BZDs were implicated in 3 out of every 4 of these deaths, (HRB, 2016*).* The interviewees described how BZD misuse resulted in decreased motivation resulting in a lower level of educational achievement. Level of education is positively related to physical health (Baker, Leon, Smith Greenaway, Collins, & Movit, 2011*)*, mental health (Dalgard, Mykletun, Rognerud, Johansen, & Zahl, 2007; Keyes, Dhingra, & Simoes, 2010), and employment (Organisation for Economic Co-operation and Development, 2011), and social support (Ross & Willigen, 1997). Consequences can be social as well as physical and emotional. Nearly all of the young people interviewed lived in the family home, so changes in behaviour were noticed by their parents. This resulted in conflict in the household between the young person and their parents. In one case, the conflict reached a level where the young person's mother needed the assistance of the police to remove the young person from their house. Previous studies have noted that educational materials on the abuse of prescription medication reduces use and increases engagement with treatment services (*Tannenbaum et al., 2014)*

This research allows an insight into the experiences of Irish young people who consume BZDs; however there were limitations to the study. The data collected were semi-structured interview data collected from a purposively-sampled population. Generalisation of this data is not possible, however the authors have attempted to maximise the transferability of this research by using thick description in the findings. Polydrug use is prevalent amongst young BZD misusers and these participants were unlikely to differ. (Kurtz, Buttram, & Surratt, 2017). This could have affected the participants experience of BZDs, but was not captured in the study and so could be a potential confounder. It could be seen in the discussion, that much of what was reported in the findings were

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corroborated by independent qualitative and quantitative studies. The variation in interview lengths was a limiting factor. These were the primary researcher's first semi-structured interviews and thus, in the initial interviews, may not have explored themes to the same comparable depth as most of the interviews. The impact of this does not appear to have influenced the study greatly, as most of most interviewees spoke of the same themes. The second and main factor was the hesitation of participants to speak to the researcher, a stranger, about past illicit activities.

Conclusion

BZD misuse by young people is a complex, multi-faceted experience. This study captured descriptions of it that could aid understanding of the experience. BZDs are used by young people coping with the pressures of life, and its misuse is encouraged and normalised by those around them. This short-term remedy has long-term consequences of which they are unaware.

Education about BZDs and their risks to young people, to families, and to the public can raise awareness and may reduce BZD misuse. Improvement in services to support young people who want to withdraw from BZDs is vital and these should be cognisant of possible trauma experiences and completed in conjunction with mental health supports. There has been well documented reports of the increase in mental health issue in adolescence particularly since the 1990s, preventative measures that improve young people's capacity for emotional regulation should be considered in all educational settings. Future research on the role of trauma and mental health in young people's substance misuse is required.

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Table 1. Interviewee characteristics

Participant	Gender	Age category	Race	Benzodiazepine use status
YP01	Male	18 – 25 years	White Irish	Former user
YP02	Female	18 – 25 years	White Irish	Current user
YP03	Male	18 – 25 years	White Irish	Former user
YP04	Male	18 – 25 years	White Irish	Former user
YP05	Female	18 – 25 years	White Irish	Former user
YP06	Male	18 – 25 years	White Irish	Former user
YP07	Male	18 – 25 years	White Irish	Former user
YP08	Male	18 – 25 years	White Irish	Current user
YP09	Male	18 – 25 years	White Irish	Former user
YP10	Male	18 – 25 years	White Irish	Current user
YP11	Male	18 – 25 years	White Irish	Former user
YP12	Male	18 – 25 years	White Irish	Former user
YP13	Male	18 – 25 years	White Irish	Former user

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Table 1. Description of categories/themes and number of related interviewees

Categories/ themes	# of interviewees
Motivation to take BZDs	11
Positives of BZD misuse	5
Avoidance of negative emotions	8
Consequences of BZD use	13
Social functioning	8
Family life	8
Negatives of BZD use	11
Compulsive nature of misuse	11

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Appendix I – Interview Guide

- Can you tell me about the first time you took sweets?
  - Source of sweets
    - GPs
    - Dealers
    - Family
  - Family use
  - Friend's use
    - Any change in friend's use since treatment
  - Knowledge/attitude towards sweets before ever taking them

- Could you describe a typical situation when you take sweets?
  - Different types of benzos, *do you have a favourite sweet?*
  - Positive experiences with sweets
  - Negative experiences with sweets
  - Any situations that lead you to taking sweets
  - Impact of sweet use on school/work
  - Involvement with the Gardaí/courts etc.
  - Family tolerance of drug use
  - Recreational activities

- Present situation
  - Withdrawal experiences, if any
  - Experiences of relapse, if any

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