

***“It’s a horrible situation for everyone”*: the impact of over the counter and prescription medication misuse on friends and family**

Abstract

Introduction: Over the Counter (OTC) and Prescription Only Medication (POM) misuse is of concern. Little is known about the impact on friends/family who provide individuals with support. It is important to increase understanding to identify how substance misuse services (SMS) and others can better meet their needs. The aim is to explore the impact of OTC/POM misuse on friends/family and improve an understanding of how this may be reduced.

Methods: Ethical approval was obtained and confidential semi-structured interviews were undertaken with a modified grounded theory approach. Participants were recruited from community adult SMS in England. Verbatim transcripts underwent thematic analysis using NVIVO and findings are reported in line with COREQ.

Results: Eight telephone interviews (62.5% female) included a variety of different friend/relative relationships. Data saturation was felt to have been achieved, and identified that friends/family were significantly impacted, in long-standing and varying negative ways. Five themes were identified: impact on finances; impact of managing side-effects/withdrawal symptoms; impact on relationships; treatment interventions and personal support. Especially due to the psychological burden, friends/family benefit from holistic support, including improved awareness of OTC/POM misuse and interventions from healthcare/SMS providers, social services, affected others and their personal support network. Relationships where honesty and openness are encouraged, enable friends/family to provide more support and advocacy.

Conclusions: Care providers should include friends/family when delivering holistic interventions. They should be vigilant for safeguarding issues and the impact on children, and improve approaches to withdrawal symptom/side-effect management, medicines optimisation and service responsiveness. Future research should include more participants and other SMS services.

Key words

Over the Counter Drug Misuse, Prescription Drug Misuse, Interviews, Friends, Family, Substance Misuse Services

1. Introduction

1.1. Medication misuse in England

Over the counter (OTC) and prescription only medication (POM) misuse, (where medication is intentionally used for non-medical purposes in a way not intended by a clinician or the manufacturers), can have significant impact on physical and mental wellbeing, with wider socio-economic effects (Ali, *et al.*, 2020; Barrett, *et al.*, 2008; Chan, *et al.*, 2006; Gossop and Moos, 2008; Jones, *et al.*, 2012; Lyndon, *et al.*, 2017; Macleod, *et al.*, 2019; Smith, *et al.*, 2013; UNODC, 2021). This is of particular concern when taken in combination or at the same time as other substances, because harms such as drug related deaths are more likely to occur (ACMD, 2016; ONS, 2021; Bohnert, *et al.*, 2013; Butler, *et al.*, 2010; MHRA, 2020; Pv, *et al.*, 2018). It is estimated that 9% of people in the UK know someone who has a serious problem with the misuse of prescribed medicines (YouGov, 2022). As it continues to be of growing concern in the UK, it has led Public Health England (PHE) (now known as the Office for Health Improvement and Disparities) (Marsden, *et al.*, 2019; PHE, 2020), the National Institute for Health and Social Care Excellence (NICE) (2022) and the Department of Health and Social Care (DHSC) (2021) to publish associated reports.

1.2. Impact on friends and family

The impact of substance use on families (including children) is not to be underestimated, and the need for improvements in substance misuse services (SMS) and other support such as the value of social services has been reported by others (AFA, 2018; Lander, *et al.*, 2013; Manthorpe, *et al.*, 2015). As outlined by Adfam (2023), the impact of substance use on an individual's friends/family are variable and can include: stigma; isolation; stress and anxiety; mental and physical health; trauma; strain upon relationships and finances: however it is not known if this is different for OTC/POM misuse. OTC/POM misuse has been found to have negative consequences on relationships and children are also affected (Kirschbaum, *et al.*, 2020; PHE, 2021), though recent research from Wolf (2021) suggests that misuse in isolation is not associated with child maltreatment.

Friends and family have been identified as having a significant role in facilitating access to OTC/POM (AOG, 2012; Pancari and Baird, 2014). Where individuals can speak to their friends/family about their use this has been found to positively impact on the persons' recovery, for example by providing support and prompting change, managing access to supplies and monitoring for indicators of relapse (Cooper, 2011; Cooper, 2013; Kirschbaum, *et al.*, 2020; Nielsen, *et al.*, 2010). Friends and family have been found to positively support individuals on their recovery journey for example by identifying issues regarding the use of substances and underlying wellbeing issues, motivating, and sustaining change and associated improvement in outcomes where pharmacological interventions are utilised, even when there is no professional involvement (Carballo, *et al.*, 1999; Cooper and Nielsen, 2017).

Friends and family often take on the role of being the person's carer in the case of problematic and dependent use and the need to involve them in treatment system approaches has been previously highlighted by Gittins, *et al.*, (2018). Services must support the adequate assessment of their needs in accordance with the Care Act 2014 (Manthorpe, *et al.*, 2015) and signpost effectively to supportive resources. Furthermore, the UK Government's new drug strategy 'From Harm to Hope' highlights the need to prioritise the needs of families (DHSC, 2022). This strategy outlined the needs for 'family hubs' which locally join up families, professionals and service providers and has promised to invest £200 million in the 'Supporting Families Programme'. However, it is not known if the needs of friends/family vary depending on the type of drug, such alcohol, or illicit substances, OTC or POM that the person they are supporting is using.

1.3. Research rationale

As a recent systematic review identified, OTC/POM misuse may be detected and explored in a variety of ways; however, there is a current paucity of published UK research which outlines their misuse in people accessing substance misuse services (SMS) (Gittins, *et al.*, 2022a). There is a particular lack of published research relating to the impact on friends/family from their own perspectives. Improving an understanding of this should enable identification of developments required. For example, if SMS quality improvement approaches are outlined, this knowledge could be used to further optimise the provision of care delivery for individuals and tailor the concomitant support required for their friends/family.

1.4. Aim

The aim is to use semi-structured interviews to explore the impact on adult friends/families who are supporting people who have misused OTC/POM and are currently accessing adult community SMS in England. The objective is to improve an understanding of how any identified impact may be reduced.

2. Method

2.1. Selected methodology

Confidential semi-structured interviews with a modified grounded theory approach were chosen to explore OTC/POM misuse because they have been shown to be effective to gain knowledge on this topic and generated the most complete data sets (Gittins, *et al.*, 2022a; Noble, *et al.*, 2012). The questions were designed to explore the perspectives of friends/family regarding the impact of OTC/POM misuse on them, and the interview guide was piloted and reviewed by key stakeholders. The research was conducted during the COVID-19 pandemic, therefore virtual interviews were prioritised over face to face contact. This was to enable interviews to be conducted at SMS across the UK and in line with COVID-19 restrictions, where service sites may be closed, participants may be self-isolating and interventions for

friends/family were being provided remotely to reduce the risk of virus transmission. Interviews were digitally recorded (on a Dictaphone) and fully transcribed verbatim by an independent transcriber: ad hoc field notes were made if required and all potentially identifying information was deleted and randomly assigned codes (known only to the Researcher - RG) were used to identify participants thereafter (Brod, *et al.*, 2009). The findings have been reported in line with COREQ (Tong, *et al.*, 2007).

2.2. Inclusion criteria

- Adult aged over 18 years.
- Capacity to consent.
- Has a close friend/immediate family member that has misused OTC/POM (for intentional non-medical purposes) and is currently receiving community treatment from Humankind (one of the UK's largest national third sector specialist SMS providers and its wholly owned subsidiary Exeter Drugs Project [EDP]) (Humankind, 2021).

2.3. Exclusion criteria

Non-English speaker or where additional needs (e.g., lack of timely interpreter availability) could not be met.

2.4. Data collection

Participants were recruited by SMS staff during the routine contact that they had with them (after receiving written and verbal guidance on how to facilitate this by the Researcher) or identified by their friend/family member when they had contact with the SMS. They were then contacted by the Researcher and informed consent was obtained for their participation. To capture a wide range of views and experiences, all eligible participants who were identified during the study period were invited to participate until data saturation was felt to have been achieved (Brod, *et al.*, 2009; Guest, *et al.*, 2006).

2.5. Ethical considerations

The interview guide and associated methodology were reviewed and approved by Humankind, EDP and Aston University's Life and Health Sciences Ethics Committees (ID#1655). No incentives were provided for participation. Informed consent was obtained prior to interviews commencing: their confidential, voluntary involvement and the lack of impact on any support they receive regardless of their decision to participate was made explicit. A participant information form supported this process, which included further information about the lead researcher (RG) and the rationale for the research.

2.6. Analysis

Thematic analysis was used for the associated qualitative data. All researchers were suitably experienced in qualitative analyses and have a particular interest in this area of research and have previously published on the topic of OTC/POM misuse (Gittins and Cole, 2021; Gittins, *et al.*, 2022a; Gittins, *et al.*, 2022b; Gittins, *et al.*, 2022c). The lead researcher (RG) who is a female pharmacist and was previously unknown to the participants, conducted the interviews and checked the transcripts to ensure: completeness and anonymity; any contradictions to the key conclusions; any observations such as changes in intonation; and coded the data. This was verified (by IM) and a third researcher (RV) sought to resolve any disagreements. RG and RV have significant experience of working in SMS and IM has a notable healthcare-academic background. From the generated codes, themes were developed, and the findings summarised in a descriptive account, supported by illustrative quotes (Braun and Clarke, 2006). NVivo (version 12) was utilised as it is an intuitive package; however manual rather than inbuilt analysis was used to ensure that no nuances were missed (Gibbs, 2002).

3. Results

3.1. Summary of interviews

Data collection occurred during the COVID-19 pandemic, between February 2021 and March 2022. All eight interviews were conducted on the phone whilst the participant was in their own place of residence, with a mean of 16min 49 secs (range 7min 50 secs to 37min 39 secs). No participants had additional needs which required support during the interviews and all fully participated without other individuals knowingly present, for the complete duration of their interview. The majority were female (62.5%) and the SMS that their friend/family member was accessing, and the relationship type is summarised in Table 1.

After themes were identified their findings were discussed (with IM), and no differences were identified. Thematic analysis enabled further explorations of the data which are evidenced below, including participant's quotations: data saturation was thought to be achieved.

3.2. Characteristics of OTC/POM misuse

Opioids (tramadol, oxycodone, codeine products), pregabalin and benzodiazepines (diazepam and nitrazepam) were the OTC/POM reportedly being misused: tramadol and codeine products predominated. Reported polypharmacy also occurred, though the use of other substances was generally infrequent and minimal. In all cases, OTC/POM misuse was thought to have occurred for several years and the medication was being swallowed. Where known, pattern of use was variable, sometimes dependent on what could be obtained, but generally described as daily and dependent.

Therefore the associated consequences are unlikely to be transient in their impact. A variety of legal and illegal sources were used, and often in combination when struggling to get hold of supplies. Iatrogenic dependency and familial substance use was described.

3.3. Thematic analysis

From the thematic analysis, five overarching themes were identified: impact on finances; impact of managing side-effects/withdrawal symptoms; impact on relationships; treatment interventions and personal support. OTC/POM misuse was generally regarded as overwhelmingly negative, with consequences for both the person and their friends/family:

“For the last 5 years, it’s just ruined his life, really ruined his life. He’s not the person he was...it’s a horrible situation for everyone...It’s not just the person they’ve got on the prescriptions whose life is ruined, it’s the family around them as well” #08

3.3.1. Impact on finances

Participants rarely knew exactly what their friends/family was spending on their OTC/POM misuse, though many acknowledged that notable amounts of money were required to afford the OTC/POM or that financial support was needed due to the consequences of misuse, such as inability to work fully or to be able to afford psychological treatment.

Friends/family often personally felt the financial impact by providing the required financial support:

“She’s got a very, very part time job so she’s totally dependent financially on us...I’m supporting her 100% financially...pay [for her to] speak to a therapist once a week” #01

“I’m pretty sure most [money] had gone on, you know, internet codeine...fortunately, her dad can pick up the tab [for talking therapy]...maybe I do end up supporting her financially...if she’s run out of money” #02

For their friend/family member to be able to afford their OTC/POM misuse, participants also experienced personal theft of their own money or medication supplies:

“He would take the last £30/40 out of my bag just to stock up for a week” #08

To mitigate this, or to alleviate their anxieties about their friends/family finances, they sought increased security arrangements or forcibly took control of their finances:

“The lengths that she went to were quite extraordinary to get my tramadol...In the end, I got a safe” #02

“I took the cash card off him. I weren’t giving him any money so he couldn’t do owt like that” #06

3.3.2. Impact of managing side-effects/withdrawal symptoms

Participants described withdrawal symptoms as challenging to manage: they created worry, especially as they perpetuated use, sometimes leading to seeking alternative sources, including illicit substances to try and alleviate them. This escalated participant concerns due to associated behaviour, including dishonesty and absence from the family home, and added to relationship dynamics (see 3.3.3. *Impact on Relationships*):

“If he couldn’t get hold of tramadol when he were at home, he wasn’t a happy person because obviously he were withdrawing...he were horrible, so it was making a really big impact on us...he wouldn’t stop at home...He ended up taking cocaine and crack cocaine...And if [friends] haven’t got [access to tramadol via prescriptions], then that’s when he were turning to other substances...He’d disappear for days...that made a big impact on me and my son because obviously we didn’t know what he were doing. We didn’t know if he was ok...” #08

Participants also reported concerns about side-effects which added to their worries and the support they were needing to provide, especially relating to (rapidly) escalating use with loss of control and worsening mental health issues:

“Before we knew it, it were totally out of control...He got into a more and more depressive state as the day went on...he was feeling suicidal” #06

The physiological effects of combination codeine products were a particular worry for participants due to the risk of paracetamol overdose, gastrointestinal damage and tolerance to opioid analgesics:

“She would be overdosing on paracetamol and ibuprofen in order to get the more amount of codeine...I worry, not just about the addiction but the fact that she’s damaged her body...can no longer have any kind of opioid pain relief” #02

Consequently, having reassurance of physical interventions such as liver function tests helped alleviate participants’ anxiety:

“She was taking serious amounts [tramadol and co-codamol] enough for me to think, oh my God, what about her liver...I remember being quite relieved when she said she’d had a check and her liver was ok” #01

3.3.3. Impact on Relationships

Often it was due to the discovery of or problems in sourcing supplies, or their role in obtaining OTC/POM that led to friends/family identifying that problematic misuse was occurring. After the true level of misuse was revealed, the extent of hidden behaviours became more evident: participants reported that they were previously naive to these and they were shocked by their discovery. This created negative impact on their relationships, caused challenging dynamics and led to arguments:

“That’s when I found out...and that’s when it got heated” #03

“I really really noticed when we went on holiday...I said ‘you really need to get this sorted now because it’s ruining our lives’...We were arguing...It were just a nightmare, an absolute nightmare” #08

Relationships (especially family dynamics and the impact on others) were strained, often due to a lack of trust or irritation, and usually associated with dishonest behaviours:

“I don’t know whether she did get migraines really...I would get cross...she’d stolen it from me...She’d come up with all these weird and wonderful stories...the behaviour becomes deceitful...[husband] got really irritated with her...and then it got to the point where if she didn’t move out, he was going to move out” #02

The negative impact on relationships was also described as going beyond immediate family/close friendships:

“When he was going through his bad times, his friends sort of backed off. They didn’t want to know...” #08

For many, ongoing challenging family dynamics, communication and trust issues continue, indicating the long lasting effects of the misuse, and some more than others, became accepting of the situation that they found themselves in:

“We fall out regularly but that’s the nature of it” #01

“An addiction’s an addiction and he doesn’t care what he’s saying to me and he doesn’t care how he’s going to get these tablets, as long as he get them and all I want is my son back...” #06

Trust issues could be particularly pronounced where children were affected:

“[Son] still got trust issues...He’s put an app on his phone where he can see where his dad is at all times...to make sure he’s coming back...” #08

However, in one case (#05) the participant had contrasting views regarding the impact that their parents’ OTC/POM misuse had on their relationship or their ability to appropriately parent, perhaps because of the hidden behaviours making it difficult to detect:

“When I was like 15...It was like go and get it for her...When I was in school...she was a normal mother. You wouldn’t have known. No one knew, no one and she would always do the gardening, take me out – for days out like she was a normal mother. It never affected her bringing me up whatsoever” #05

Participants provided notable long-term support, often described as demanding and constant. Positive relationships where there was greater honesty, openness and empathy, reduced the negative impact by enabling more support provision and greater advocacy:

“She’s been fairly open with me and her dad...I used to say to her ‘please just be honest with me’ and I think I was the first one that she told...she knew that I wouldn’t be mad...I would want to help...I am sort of the one that [daughter] thinks has got her back. Which I have...I will never, never, never, ever not be there for her...I contact her every day. I speak to her, I try to see her as much as I can, even if it’s just for a walk” #02

“When I ask him a question he doesn’t lie. He tells me and then he was telling me how much he’d actually taken...then other things came out...I do try and get him the help...I don’t judge...help the best I can...involved anybody I could” #06

This was particularly notable where the participant had their own lived experience or otherwise an understanding of underlying trauma/mental health issues:

“I know that the lengths that you will go to, to get your fix and how you get deeper into an addiction. How it rules your life more and more...” #02

Indeed, the more educated about OTC/POM misuse that participants were, the more they felt able to empathise and advocate for their friend/family member. Participants without this knowledge or where they held negative personal opinions about the use of medication more generally, indicated that they held stigmatising views and a lack of empathy:

“I don’t know what the long-term side-effects of tramadol are...I don’t know whether [support for self is] available...I had a [negative] perception at first and probably still have some prejudice now” #01

Some consequently described a need to improve their own knowledge, including how to access support, so that they in turn could provide better advocacy or receive more support themselves:

“We just thought it was a painkiller...I didn’t realise how addictive it was...if I’d have realised how addictive they were in the first place, I would have said, you know ‘give him something else’...” #06

There were reports of SMS engagement having a positive impact on their relationships too:

“Since he’s been on this [SMS medication] reduction...he’s interacting with me. He’s a much better person. He’s happy you know, he’s chatty, he’s sleeping well” #06

Similarly, the effect upon positive parenting as a result of SMS engagement was observed:

“The bond between them [father and son] is absolutely fantastic now [since SMS engagement]” #08

To mitigate their concerns about the impact of OTC/POM misuse on their affected friend/family members' ability to effectively parent, participants ensured appropriate support was in place through other routes too, such as social services, schools, and widening their personal support network (including involving others in childcare arrangements):

"When people found out how bad it were, a lot of people stepped in...taking her children to school, looking after her children" #04

"[Son] seeing a psychologist once a week at school...I had the social services involved. So they've always been a good support...we have meetings once or twice a month with them and school" #08

3.3.4. Treatment Interventions

Overwhelmingly, participants expressed concerns that improvements in healthcare professional awareness of how to manage the risks and consequent emergence of OTC/POM misuse (especially relating to primary care prescribing practices and lack of prescribing controls) were needed. Reported deficient clinical practice had an impact: it put more pressure on friends/family, caused them to experience anger and frustration, a sense of hopelessness and a feeling that more should have been done and earlier, especially during COVID-19 where access to POM was felt to have become easier:

"My concern is the ease with...how [daughter] was able to do this tactic of getting prescriptions early and starting to build stocks...giving out prescriptions like sweeties...Through COVID...the ability for you to get your normal prescription drugs that you need easily has increased dramatically" #01

"They just stopped his prescription...He was feeling really, really poorly...The doctors were absolutely useless with him and it's still hard to this day. If he's really poorly, he never goes to the doctors because he lost all faith in them" #08

The burden on participants and their concerns were reduced when there were helpful responses from healthcare professionals, such as having appropriate boundaries, supporting gradual reductions and being empathetic:

"I'd rung [GP] and I told him what were going on...he's trying to do a reduction with [SMS]...the GP has put his foot down and said 'right, this is it now. You're not getting any more tramadol. This is what we're going to do'" #06

To improve this further, the need for monitoring access to medication supplies was highlighted:

"It needs to be monitored because it's absolutely disgusting...[GPs] need to monitor things a lot more closely" #08

Additionally, when specialist service delivery was found to be lacking (predominantly related to responsiveness and tailoring the type and frequency of contact), participants described the increased impact this had on them, especially when they had personal anxieties about mental health needs not being met:

“Services for all psychiatry and psychological issues are all so stretched...I found her curled up on the bed sobbing, with a knife...waited for months and months and months for anybody to contact her...[SMS] doesn't get back to her for a few days or even a week...when you are struggling with anxiety and you're trying to get in touch with somebody and then you can't, that makes it even worse and then you feel like you're being a nuisance and then that heightens your anxiety even more” #02

However, psychosocial interventions were well received and wide-ranging, including 1-2-1 and groups, mindful colouring, housing support, exercise and caring for pets. Participants also reported opioid substitute medication as a positive intervention, though they had anxieties about how consequent discontinuation of the medication would occur and indicated the need for robust relapse prevention planning:

“Worried about when she's off [SMS medication] and what happens at that point...the potential for her to go straight back on prescription medication is a huge risk. Huge...” #01

Participants expressed less worry when they felt that the interventions weren't being rushed (especially during COVID-19), and outlined their role in supporting the delivery of these interventions too:

“He doesn't have to go out and do [exercise]. We can do in room and put it on the television” #06

“With COVID it took a lot longer for him to come off his medication, so he's had a lot longer on it, which has done him a world of good” #08

3.3.5. Personal support

There was notable variation in participants receiving personal support, which could potentially reduce the impact on them. Some viewed themselves as self-sufficient without the need for personal interventions or had a lack of expectation of support being provided:

“I've not been provided with support, and I suppose I didn't expect it...I haven't felt I've needed it really” #01

Others articulated that if assistance had been required, they already knew where to access it:

“I was fine...I'd have probably spoken to [friends] support worker...I'd have just got advice from there” #04

Conversely, some participants described a lack of support and awareness and struggled trying to manage in isolation, especially due to the psychological impact:

“There’s times when I’ve been at my wit’s end...they forget about parents that are struggling...depressed with it and just want to sit and cry...I’ve had no support whatsoever and I don’t tell anybody. I deal with it on my own...There’s not a lot of people that knows about what’s going on” #06

Participants expressed a sense of helpless acceptance of their situation, with ongoing notable impact on their work-life and psychological wellbeing:

“Sort of tipped me – as a father – over the edge...85% of [worries] are [daughter] all the time. It’s just the way it is” #01

“I have the occasional meltdown at work when I get really upset about her...Two periods off work with stress and [daughter] has been part of that stress” #02

When they did receive support, it was often sought via their existing support network or related to holistic concerns such as involvement from social services or support with housing. In some cases notable personal psychological interventions were needed and participants described obtaining these of their own volition, typically requiring them for long durations to reduce the significant impact on their mental health and the wellbeing of affected children too:

“Nobody [NHS/SMS] provides me with any support...my work family if you like, are really lovely...I am [accessing via private healthcare] a counsellor” #02

“A big impact on my mental health...it were more me and the kids that needed a bit of support...We got there. We’re getting there...Social services wanted to close the case now, but I said I’m not ready” #08

When SMS offered them personal support it was well received and also mitigated the impact further:

“[SMS] are absolutely outstanding. They’re brilliant, totally brilliant...If I’ve got any concerns, just to give them a ring...I’d recommend anybody going to [SMS] or owt like that...” #08

The positive impact of connecting with people who had similar experiences and the importance of improving motivation and maintaining hope and optimism was described, suggesting the need for ongoing improvements in peer support provision amongst affected friends/family:

“Another mum said to me...it can happen, and you can get your boy back. Hopefully in the future, I can be one of these mums that says to another mum...You know, is there light at the end of the tunnel...it can be done ...” #06

4. Discussion

4.1. Key findings

The interviews allowed eight individuals to describe a wide range of experiences. Interviews were conducted during the mid-stages of the COVID-19 pandemic from different community SMS from across England. A range of different friends-family relationships were included, though it is worth noting that most participants were female which may be indicative of women perhaps more commonly offering a 'carer' role (Sharma, et al., 2016).

As has been outlined by others, overwhelmingly the consequences of OTC/POM misuse are viewed as negative, wide-ranging and long-standing, especially where the duration of misuse occurs for many years (Coombes and Cooper, 2019; Cooper, 2011). Subsequently, required interventions to mitigate the impact will likely be needed for a similarly long duration and will need to be variable in nature. Whilst some may not feel that they need or want personal support, these findings indicate the need to raise awareness of availability and proactively provide this as an option for friends/family via SMS, since participants reported it has been well received when used. Lander, *et al.*, (2013) and Cooper and Nielsen (2017), also acknowledged the invaluable support that can be accessed through alternative sources, such as school pastoral services, counselling services, social services or existing personal support networks. Recently published national guidance (PHE, 2021) also highlights the importance of peer to peer support and these findings outline that SMS may have a valuable role to play in facilitating opportunities for friends/family to be better connected to affected others, in order to share their experiences, galvanise optimism and receive more mutual peer support.

As has been found with other substance use disorders, and highlighted by organisations such as the Alcohol and Families Alliance (AFA), providing early intervention and ongoing support to address the mental wellbeing needs of friends/family is of particular importance and especially in the case of children, to avoid childhood trauma and perpetuation of OTC/POM misuse or other substance use disorders in future generations (AFA, 2018; PHE, 2021). Indeed, the emotional challenges, trust issues and associated relationship dynamics may be alleviated by increasing the delivery of psychological interventions such as structured family therapy sessions, and such an approach is supported by the new government strategy (DHSC, 2022). Organisations such as Adfam (2023) have outlined the impact that substance use disorders has on friends/family and therefore, the finding that having them meaningfully engaged with SMS has a positive impact upon relationships, including parenting, is commensurate with this. This is pertinent in the case of familial (including parental) substance use disorders which was identified, and has been similarly reported by others (Vertava Health, 2018).

The lack of knowledge about how much money is being spent on OTC/POM misuse is perhaps to be expected given the secretive behaviours and involvement in illicit activities, compounded by relationship issues associated with honesty and openness (Cooper, 2011). Friends/family cited experiencing personal financial impact when providing support, by

providing direct financial support or experiencing theft: this issue has been previously raised by support charities such as Adfam (2023). Therefore, raising awareness of financial support services and enabling them access to safe storage facilities may facilitate a reduction in this burden. Additionally, as friends/family who were more informed about OTC/POM misuse described being more empathetic and more able to advocate for their friend/family member, increasing awareness of OTC/POM misuse amongst the general public may also increase their ability to identify early onset of problematic use and improved access to required support (including for themselves). The need for greater awareness has been raised by numerous researchers, in several reports and in national guidance too (ACMD, 2016; AOG, 2012; Coombes and Cooper, 2019; Cooper, 2013; Marsden, *et al.*, 2019; NICE, 2022; PHE, 2020; UNODC, 2021).

Furthermore, the findings add to the published literature outlining that improvements to monitoring access to medication by healthcare providers is needed (DHSC, 2021; Van Hout, 2018; PHE, 2020) as it adds to the negative impact on their psychological burden. There were particular concerns relating to prescribing practices in primary care and service responsiveness in specialist mental health and SMS, though anxieties and frustrations were alleviated when healthcare professionals responded with empathy, enabled gradual reductions and put in place appropriate boundaries.

4.2. Strengths and weaknesses

Although only eight interviews were conducted, a rich data set was still obtained and themes were identified; indeed Guest, *et al.*, (2006) have indicated that the “*basic elements for metathemes*” may occur with just six interviews. Additionally such approaches with limited sample sizes have been successful in sensitive subject matters such as this (Gittins, *et al.*, 2018) and the challenges in recruitment during the pandemic have been similarly reported (Gittins, *et al.*, 2022b). Greater assurance in the findings may have been achieved if repeat interviews and member-checking were implemented, and this could be considered as a future development to strengthen data reliability and validity. This may have been further improved if the person undertaking the data analysis had been blinded; however, when transcripts were independently reviewed no differences were identified, suggesting a degree of validity and reliability.

The use of a semi-structured interview guide which incorporated the use of open questions encouraged more comprehensive, relevant, and unique answers from participants, and stakeholder review and piloting the forms helped to ensure suitability (Brod, *et al.*, 2009). The use of an interview guide also supported the Researcher and provided consistency with an outline of the key areas to be covered, whilst also allowing flexibility to explore issues that had not been anticipated. This methodology has been found to be similarly effective for exploring sensitive substance use issues (Gittins, *et al.*, 2018; Van Amsterdam, 2015; Van Hout and Brennan, 2011; Van Hout and Bingham, 2012). Since participants were also asked to share their experiences in an artificial environment this may lead to problems with

reliability. The use of the same Researcher should have limited variability between interview approach and the analysis process. The Researcher is experienced in SMS delivery and speaking to people about the use of substances which enabled rapport to be quickly built. To assist in the mitigation of unconscious bias, the Researcher was not known to any of the participants prior to study commencement and they had no ability to routinely impact on individual SMS care. Additionally, by participating confidentially, virtually and on a one-to-one basis participants were more likely to share personal experiences since individual interviews allow for greater privacy and building of rapport.

4.3. Implications for clinicians, policymakers and researchers

Although a small number of interviews were conducted, the impact that the poor management of withdrawal symptoms had on friends/family was notable and especially where these perpetuated (and escalated) use: it added to their anxieties, frustration with prescribers and as it caused individuals to seek alternative/excess supplies, this had greater financial impact and further affected their relationship dynamics too. This tentatively suggests that there are implications for prescribers and policymakers who may take steps to restrict access to supplies, which may cause unintended consequences, suggesting that healthcare professionals should not reactively cease prescribing upon the identification of misuse and should have increasing vigilance for and optimal management of withdrawal symptoms. Indeed, ensuring a shared decision-making approach is in line with national guidance (NICE, 2022).

Participants outlined particular concerns about general practitioners were supplying medication; therefore, consideration should be given to removing medicines which are known to be liable to misuse from pre-authorised repeat prescription requests and improve monitoring prior to issuing further supplies in accordance with guidance from the Royal College of General Practitioners (2014). Similarly, ensuring that shared decision making occurs in the context of the persons social environment and in conjunction with friends/family (where appropriate and with consent) is important, as they can facilitate prompt access to supportive services as well as directly providing support themselves. Indeed, such approaches are highlighted in the recent NICE guidance (2022), and improved engagement may also alleviate friends/family feelings of frustration and reduce their psychological burden if they feel that the needs of the person they're supporting are being met.

Participants described multifaceted safeguarding issues, including access to medication supplies and finances. The free provision of access to safe storage devices should be widened beyond SMS and to friends/family who need to keep their own supplies of medication secure. As some friends/family restricted access to supplies and associated financial means to procure them, health and social care staff must remain vigilant for these issues, including the risk of friends/family inadvertently becoming perpetrators of financial abuse.

Future SMS developments should include improved responsiveness and tailoring the type and frequency of contact and duration of interventions. Encouraging the role of friends/family to improve effective engagement and the success of varied psychosocial approaches highlights the need for a person-centred approach which is in line with UK government guidance (DHSC, 2017). As friends/family had particular anxieties about the side-effects of OTC/POM misuse, healthcare professionals should consider how friends/family can be as involved in consultations so they can be kept informed and given reassurance as appropriate. Although there were positive views of prescribed SMS interventions, SMS should make additional efforts to ensure that individuals are not rushed through treatment and proactively include friends/family in robust relapse prevention planning to alleviate their anxieties. This is in keeping with national guidance that clearly outlines the importance of carers being involved in all aspects of care planning (PHE, 2017).

Future research should incorporate additional interviews (especially with more friends since only one was included here), and expanding to the inclusion of more SMS or different treatment providers and in other areas of the country may allow for additional perspectives to be obtained and may provide further reassurance that data saturation has been achieved. Additionally, since no characteristics other than the relationship type and gender was captured, there may be value in exploring this further, for example by incorporating ethnicity and age. The nature of the support and education that individuals require may also warrant further consideration.

5. Conclusions

This study found that OTC/POM misuse is highly variable in how it impacts on the persons' friends/family, though the associated consequences are overwhelmingly negative. Positive relationships which facilitate honesty and openness, and improved education and empathy, enable more support to be provided and improved advocacy. To alleviate anxieties and the impact on the psychological burden of friends and family, improvements are required to treatment interventions, including healthcare professionals approach to withdrawal symptoms, optimisation of medication supplies and specialist service responsiveness. Interventions need to appropriately include friends/family when delivering holistic person-centred care, which should consider the involvement of SMS, social services, support with housing and finances, school pastoral support, affected peers, personal support networks and other healthcare providers such as GPs and mental health services as appropriate. Health and care providers must be vigilant for safeguarding issues, and the impact of OTC/POM misuse on children. Future research should include more participants, other SMS providers and geographical areas.

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Contributors

- RG conceived the paper, designed the study, conducted the data analyses, and led on writing the initial draft.
- RV contributed to the manuscript writing.
- IM supervised the research and contributed to the manuscript writing.
- All authors contributed to the critical revisions, read, and approved the final manuscript.

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