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Death holds no fear.

Overdose risk perceptions among people who inject drugs

Abstract

Drug overdose is an important public health problem. Despite well-known risk factors and various preventive measures, the overdose mortality rate has increased substantially in several countries worldwide over the past decade. There is therefore a need to understand overdoses on the basis of how people who inject drugs (PWID) perceive and experience risk. Based on qualitative interviews with 80 PWID, recruited from low-threshold settings in Norway, the study explores the complex lived experiences and perceptions of overdose. The qualitative approach is sensitive towards lived experiences and provides new understandings of overdoses. The analysis revealed three types of accounts concerning perceived overdose risk. First, interviewees described death as natural and not frightening, based on perceptions of death as universal, a part of their high-risk lifestyle and their previous overdose experiences. Second, they presented accounts of how they perceived others to be at greater risk of overdose than themselves, in respect of experience, skills and tolerance. Finally, interviewees described an indifference towards death, on a continuum between the wish to live and death as relief from various life challenges. This study illustrates how PWID inhabit drug-using environments which entail a high-risk lifestyle. Faced with these risks, the interviewees presented stories which may serve several functions, such as neutralizing feelings of risk and stigma and gaining a sense of agency and control. They also created symbolic boundaries in order to form positive perceptions of self, by distancing themselves from other stereotypical people who use drugs. The participants additionally expressed an indifference towards overdose death. This may entail that avoiding death, the main rationale of overdose interventions, is viewed with indifference by some PWID. This is important for understanding the complexity of overdose mortality and should be reflected in future harm-reduction initiatives.

Keywords: overdose, drug-related mortality, risk, injecting drug use.

Introduction

Drug overdose is a significant public health problem (Martins et al., 2015). There has been a substantial increase in drug overdoses in several countries worldwide over the past decade (EMCDDA, 2018; Martins et al., 2015). Norway is one of the European countries with a high overdose-related mortality rate (EMCDDA, 2021; Gjersing, 2021). Several preventive measures have been implemented (Edland-Gryt, 2018; Helsedirektoratet, 2019), but the number of overdose-related deaths remains stably high.

Injecting is one of the high-risk factors associated with overdose-related deaths (Degenhardt et al., 2011; Mathers et al., 2013). People who inject drugs (PWID) experience higher rates of death than their non-injecting peers (Darke & Zador, 1996; Miller, 2009). While quantitative studies have provided a valuable overview of risk factors and causes of overdoses, less is known about how PWID perceive and relate to the risks of overdose associated with injecting.

Behaviour that may lead to an overdose involves distinct assessments and meanings, shaped by various motives and emotional factors (Richert & Svensson, 2008). Alongside a focus on the individualization of risk, scholars also emphasize the importance of socio-structural factors influencing perceptions of risk (Miller, 2005; Peretti-Watel & Moatti, 2006; Rhodes, 1997). Factors such as prohibitionist drug policies, stigma and the overall contextual drug-using environment increase the risks PWID are exposed to, and may shape how they experience and handle these risks (Maruna & Copes, 2005; Miller, 2005; Peretti-Watel & Moatti, 2006). Additionally, health-promotion strategies rely on PWID's wish to live (Miller, 2006; Richert & Svensson, 2008), but studies show that PWID often express an indifference towards overdose death (Miller, 2009; Moore, 2004). This raises the possibility that avoiding death is viewed with ambivalence by some PWID (Moore, 2004) and may help explain the limited effectiveness of preventive interventions (Miller, 2009; Moore, 2004).

The aim of this paper is to explore the complex lived experiences and perceptions of overdose as expressed by a large group of PWID. This qualitative approach may increase our understanding of factors that influence how PWID evaluate and relate to the risk of overdose associated with injecting. The analysis relies on theoretical concepts of neutralization and symbolic boundaries. This insight should help inform future overdose prevention interventions.

Risk factors and perceptions of overdoses

Overdoses are associated with a number of risk-factors such as opioid and poly-drug use, lower tolerance due to periods of drug-use absence and previous cases of non-fatal serial overdoses (Darke et al., 1996; Madah-Amiri et al., 2017; Rhodes et al., 2001; Rossow & Lauritzen, 1999). There is also an association between overdoses and depression, suicide attempts and feelings of exhaustion (Darke et al., 2007; Gjersing et al., 2011; Miller, 2009). However, overdoses are not only a result of isolated risk factors (Nesvåg et al., 2019). They may also be understood on the basis of how PWID perceive and experience risk in the context of their everyday lives.

Despite recognition of peer risk and experiences of overdose, PWID often do not perceive themselves to be at risk of overdose (Darke & Ross, 1997; Horan et al., 2015; Mcgregor et al., 1998). Scholars also argue that the perception of risk is social (Bartoszko, 2018; Douglas & Wildavsky, 1983), in which various circumstances influence a conscious risk-taking behaviour associated with drug use. This may entail individual factors such as the search for the 'ultimate rush', withdrawal symptoms or somatic or mental illness. However, risk perception is also contingent upon social context, comprising interactions between individuals and environments, and living in a stressful environment where death is common (Miller, 2009; Rhodes, 2009; Richert & Svensson, 2008). This exposure to risk and the threat of death among PWID may be incorporated into experience (Rhodes, 2009), and influence how PWID perceive and relate to the risk of overdose. It may also entail feelings of indifference towards death

(Bartoszko, 2018). Several studies present overdoses as binary in terms of intentionality (rates of intentional overdoses vary between 1% and 49%) (Darke et al., 1996; Neale, 2000). This may not capture the complexity of overdoses (Heale et al., 2003; Monico et al., 2021). Recent studies have found that more than half of respondents reported some desire to die prior to their recent overdose (Connery et al., 2019; Gicquelais et al., 2020). Thus, overdosing may be understood as behaviour with various degrees of awareness and intention (Biong & Ravndal, 2007; Miller, 2006, 2009; Neale, 2000).

Intentionality is often presented in the literature as a key differentiator of overdose type, and a binary characteristic with intentional overdoses associated with suicidality (Connery et al., 2019; Darke et al., 2007; Monico et al., 2021). However, considering the complexity of overdoses, studies suggest that there may be different degrees of suicidal ideation and behaviour leading to an overdose that are not captured within the categorical labels of 'intentional' and 'unintentional' (Bohnert et al., 2010; Monico et al., 2021). Scholars argue that the concept of ambivalence towards death is important for understanding the complexity of overdose mortality (Miller, 2006, 2009; Richert & Svensson, 2008). Thus, a more comprehensive assessment of the social and contextual circumstances surrounding an overdose may help refine future research on overdose (Miller, 2009; Monico et al., 2021).

Conceptual approach

We lean on the concepts of neutralization and symbolic boundaries when we explore experiences and perceptions of overdoses. Both theories are often used in self presentation which may serve several functions, such as to reduce stigma. Injecting drug use is associated with a high degree of stigma from the public, which may lead to self-stigma and feelings of otherness (Goffman, 1963; Luoma et al., 2007; Neale et al., 2011; Simmonds & Coomber, 2009). Neutralization may downplay intrinsic stress related to risk as well as reduce stigma,

while creating symbolic boundaries focus on avoiding stigma by distancing oneself from irrational users without control. The concepts may thus provide a useful framework for understanding how PWID comprehend and relate to risks in the context of their social environment.

Neutralization

Neutralization theory describes neutralizations as forms of techniques that may verbally resolve differences between action and expectation, specifically when responding to questions about behaviour that is inconsistent with normative expectations (Copes & Deitzer, 2015; Maruna & Copes, 2005; Peretti-Watel & Moatti, 2006; Sykes & Matza, 1957). Neutralizations may thus be understood as dynamic cognitive processes, specifically important where there are conflicts between one's self-concept as a responsible person and behaviour that may be considered as morally questionable by the general public, such as injecting drug use (Aronson, 1968; Lloyd, 2013; Luoma et al., 2007; Maruna & Copes, 2005; Trang et al., 2022). Neutralizations may also serve as adaptive mechanisms for coping with stress, modifying intrinsic conflicts when faced with serious risks (Maruna & Copes, 2005), such as the risk of overdose. However, alongside a focus on the individualization of neutralization techniques, scholars emphasize the importance of socio-cultural factors influencing constructs surrounding the perceptions of risk (Miller, 2005). PWID inhabit drug-using environments which often entail various risks, creating a subculture which incorporates the dangers of drug use as behaviours which must be justified, in which neutralization may be functional (Maruna & Copes, 2005; Miller, 2005).

Symbolic boundaries

The concept of symbolic boundaries places emphasis on how human interactions revolve around how we talk about ourselves in order to create identity and boundaries separating

ourselves from those we find less desirable (Copes, 2016; Copes et al., 2008). Copes (2016; 2008) argues that stories told by people who use drugs may be useful devices to show that their behaviour is rational when viewed in the suitable cultural context. This entails the construction of symbolic boundaries which serve several functions. For example, being able to exhibit self-control while using drugs is key in separating the functional from the dysfunctional (Gashi et al., 2021). Stories emphasizing rationality and control - which reflect larger cultural goals in most Western countries (Zajdow, 2010) - may thus show how some PWID are not like other PWID without skills and moderation. Similar to neutralization, this may reduce feelings of shame and guilt (Copes, 2016, p. 208). Such boundaries may also contribute to form social identities, and to create feelings of self-worth to gain a sense of agency and control of individual's lives. Although all people engage in boundary work, it is especially important for members of stigmatized groups, such as PWID (Lloyd, 2013; Luoma et al., 2007; Simmonds & Coomber, 2009). Consequently, studies show that PWID create symbolic boundaries in order to actively resist this stigma by distancing themselves from stereotypical people who use drugs (Copes, 2016; Copes et al., 2022; Sandberg, 2012).

In this paper, we unpack the meanings and narratives of the risk of overdose death based on qualitative data using a large sample of Norwegian PWID. The aim is to explore the complex lived experiences and perceptions of overdose as expressed by a large group of PWID. The perspectives of neutralization and symbolic boundaries show the complexity in the narratives of PWID and the functions they may serve in their everyday lives of injecting drug use and associated risks.

Methods

The study is based on qualitative interviews with 80 PWID, recruited from low-threshold services in five Norwegian cities. All sites offered services such as health and social care, needle

exchange programs, and emergency food assistance programs. Two services included a drug consumption room. The interviewees were randomly selected by service staff, snowball sampling or by the researchers on site.

Interviews were conducted in connection with recruitment and conducted face-to-face in private spaces at the services during October 2019. Three researchers (first and second authors) and two trained research assistants performed the interviews. Before the interviews started, interviewees were informed about the aim of the study, issues of anonymity and the possibility to discontinue the interview at any time. Participation was voluntary, following the written informed consent procedure. A semi-structured interview guide was used to ensure that important topics were covered, such as the interviewees' thoughts about drug use, risks, and their everyday lives. The researchers were open to the interviewees' focus and the interviewees were encouraged to share their reflections and experiences. Much room was left for free narration, allowing the interviewees to bring up various topics. This open approach may have revealed thoughts and information about, for example, indifference towards death that otherwise might not have been discovered. Most interviews lasted an average of 45 minutes, ranging from 25-60 minutes.

Interviewees were on average 45 years old (range 23-63) and 77% were males; the sample reflects the overall population of PWID in Norway (Gjersing & Bretteville-Jensen, 2018). Most of the interviewees injected drugs daily. A total of 71% of the sample used multiple substances (mainly combinations of heroin, amphetamines and benzodiazepines), 19% mainly used amphetamines, and heroin was the main drug of choice for 10%. Almost all interviewees told that they had overdose experiences, both their own as well as of drug-using peers. Although the experiences varied, this was not a product of sampling and may illustrate the risk environment the participants inhabit. The interviews were audiotaped and transcribed verbatim. Any identifiable information (geographical references, names of partners/friends) has been

removed or replaced with aliases. Transcripts from the interviews were thematically coded in HyperRESEARCH reflecting the interview guide. Topics that were introduced by the participants during the interviews or emerged from the fine reading of the interviews were added to the code list. For this article, we made use of codes such as overdoses, the use of naloxone and low-threshold services, effects of injecting, positive and negative experiences as well as reflections on life and death which were common themes in the interviews. One quarter of the interviews were coded together by two of the authors (KH and KB). Although the coding process consists of individual assessments of data, the researchers had overlapping understandings of the various codes and made a valuation that the coding was satisfactorily congruent. The remaining interviews were coded by KH alone. Coding included longer sections of text to identify the broader narratives. These codes were then analyzed in more detail to develop our analysis of overdose perceptions and experiences.

All interviewees were reimbursed NOK 200 (approximately 20 €) for their time. The interviews were carried out with persons under the influence of drugs. As a matter of the ethical conduct of research and to protect the safety of participants, we did not interview people who were not able to respond to our questions, because of intoxication or mental health challenges. The interviews varied in length and quality relative to the interviewees' level of intoxication and state of well-being. Two interviews were discontinued by the researcher, as it was considered unethical to continue due to the participants' heavy intoxication or poor mental health. The project was approved by the Regional Committee for Medical and Health Research Ethics in Norway.

Results

The analysis revealed three types of accounts concerning the perceived risk of overdose. First, interviewees described death as natural and not frightening. This was related to perceptions of

death as universal, a part of their lifestyle characterized by high risk or previous overdose experiences in which overdose risk was naturalized. Second, they gave accounts of how they perceived others to be more at risk of overdose than themselves. They believed they had control, based on experience, skills and perceived high tolerance, and created boundaries between themselves and PWID they described as less rational. Third, they described an ambivalence towards life and death, on a continuum between the wish to live and death as relief. These narratives were not mutually exclusive. Rather, they were complex and contradictory, and also operated simultaneously, both between interviewees as well as within a single interview.

Death as natural

All interviewees had overdose experiences, both their own as well as of drug-using peers. Their own overdoses involved stories where they had mainly been assisted by drug-using peers who had summoned an ambulance, administrated naloxone or by other means kept them awake. This also involved overdoses where they had woken up alone many hours after injecting, either at home or in public spaces. Many of these overdoses were described as accidents due to mixed drugs, or miscalculations of the quality of the drugs. The interviewees presented the risk of overdose as continually present. In this context, participants neutralized the overdose risk, in which death - in various ways - was described as natural and nothing to fear. Arne had overdosed several times. Yet, he emphasized that he did not fear overdose death:

> I'm not afraid of death at all. Why would I be afraid of death? I want to live, but I'm not afraid of dying. No, that's one of the most natural things: life and death. There are so many well-known athletes with elite training, and who have just fallen over and died. You can't go around thinking that you're afraid of dying when elite athletes suddenly fall over and die. So that's the most natural thing: life and death.

Although Arne said that he could have died from several of his drug overdoses, the quote illustrates his perceptions of death as something universal and natural that can happen to anybody. He thus expressed awareness of the mortality risk, yet described it as manageable. This may contribute to a neutralization from being perceived as an irresponsible risk taker, but also modifying intrinsic conflicts from the seriousness of being faced with the risk of overdose death. It may also serve as an adaptive mechanism for coping with stress, neutralizing the seriousness of being faced with the risk of overdose death.

The natural aspect of death was also related to perceptions of overdose mortality as unavoidable, a natural part of the lifestyle characterized by high risk associated with injecting. Within this context, risk was described as inevitable. Although Lukas had overdosed several times, he neutralized the risk:

> I've had 12 overdoses or something like that. But I don't know, I believe that when my time is right, it is right. Overdoses have happened, but that's something you can't avoid. If it happens, it happens.

Lukas' quote describes a social context where risk and death was a part of the participant's everyday lives, and thus described as unavoidable and normalized by the interviewees. Similarly, Bjorn said: *'If you're afraid of dying, it's not very smart to inject drugs.'* Additionally, although he had several overdoses, Pal described it as a part of his lifestyle:

> I know what it takes, and what it doesn't take. I've had so many overdoses that it doesn't scare me much. I don't know, I've just accepted the situation, that I live as a drug user,

> and especially in periods where I use more drugs. So that's how it is, and I know very well that that's a choice I make.

Pal's quote exemplifies how participants described an awareness of the overdose risk. Yet, the accounts they gave described death and risk as integral to their lives. This may be understood as a rational reaction to the risk environment they live in, which may lead to a normalization of continually being faced with risks and their consequences, including overdose death. It also highlights the importance of socio-cultural factors influencing perceptions of risks as well as behaviour that must be justified, in which neutralization may be functional. Jan described it similarly:

> Every time I inject a shot, I'm actually sitting with a gun to my head. If I make one little mistake, it's over and out. It's a bit pressured sometimes, because you know that three times a day your life is at stake.

Jan told that, although he was conscious of the risks associated with injecting, he did not want to die. Yet, based on a previous overdose experience, he did not perceive overdose death as frightening. As such, stories about death as natural were also connected to the interviewees' previous overdose experiences. They described death as an experience they believed there was no reason to fear. Jan elaborated:

> I've died from an overdose once before and that's the most fantastic thing I've experienced. You end up in a place that's just warm, loving. I can't explain it.

Jorgen had had three overdoses and did not experience them as intimidating. On the contrary, he initially described one of his overdoses in positive terms:

> I remember I could watch myself as they were administrating the defibrillator. I saw the light, and kind of how wonderful it was. It was so awesome. Suddenly, I came back to myself.

These stories highlight how interviewees associated overdoses with what they described as a natural and pleasant experience. Although not explained as a wish to die, these experiences provided a basis for a lack of fear of death. These accounts also may be understood as adaptive mechanisms for coping with stress, modifying intrinsic conflicts when faced with serious risks.

To perceive overdose death as natural and even a positive experience was also related to what they described as negative experiences of being revived after overdoses. Harald said that he had overdosed more than seven times where he had been assisted by ambulance staff:

> I don't fear death. I've been on the other side, and I don't fear death. It was worse to be revived. It was a shock because half of the staff of the hospital stood there. It's a bit of a shock when you wake up.

Several interviewees echoed Harald's story about shock or shame associated with the circumstances of revival. Jorgen referred to a situation, where being revived was described as a challenging experience. He elaborated:

> Two ambulances came, as well as the whole neighborhood. They all stood in the doorway watching me. I had peed myself out, and I had been dead. The defibrillator was lying there, and… Oh, I felt so bad. It was horrible. So defeating, degrading.

Jorgen's quote exemplifies how some interviewees described the natural aspect of death in terms of previous pleasant experiences as well as negative experiences of being revived, and thus death as less intimidating.

Overall, risks were described as continually present in the interviewees' social environment. Interviewees presented narratives expressing that, although they mainly had a wish to live, they perceived death as natural. This perception was related to accounts of death as universal for all people, and a lifestyle characterized by behaviour where risk was "normalized". They also related it to personal overdose experiences associated with pleasurable feelings or shameful feelings of being revived. This may contribute to a neutralization from being perceived as an irresponsible risk taker, but also from the seriousness of being faced with the risk of overdose death. These stories may hold insights into the complexity of both risky behaviour as well as frightening experiences, downplaying and neutralizing the seriousness and intrinsic stress of being faced with the risk of overdose mortality, in addition to the multitude of risks characterizing their drug-using environment.

Depersonalization of risk

The interviewees also expressed perceptions of overdose as a risk mainly concerning others, and not themselves. Various factors were involved here, such as perceived control based on experience. Bjornar said: '*I know you can have an overdose, but I know what I'm doing. I've done this for 41 years. It's an education, you know.*' Einar described it similarly: *'I don't think much of the overdose risk, actually. Because I know what I'm doing.'* Additionally, Henning

described overdoses as something you must take into account, and trusted his ability to be in control. In this way, he created boundaries towards drug using peers who he perceived to be more at risk than himself:

> I'm used to it. There are those who don't control their use and take too much. I don't think much about overdoses. I know what I'm doing, I know how much I can take. New beginners are most at risk, or people who don't do it that often.

Henning described himself to have skills and therefore feelings of control. Most participants expressed knowledge about various risk factors for overdose. Yet, several interviewees echoed Henning's story and emphasized control. They thereby distanced themselves and drew boundaries towards other PWID who they described as more irresponsible due to lack of skills and moderation, and thus less rational. For example, Bjorn had overdosed several times. He said that, although he was aware of the overdose risk, he emphasized the importance of experience:

> I'm not stupid. I know how much I can take. But sometimes you just push those boundaries. I kind of feel that it can happen to others, not to me. I've had more than 50 overdoses this year, so I know the odds are against me.

Kine described it similarly:

> I'm not afraid of overdoses, I'm not. I know how much I can take, but I've had some overdoses, though. I try to avoid it, but I know how much I can take.

Another reason for perceiving others as more at risk of overdose concerned perceptions of themselves as highly tolerant of drugs, such as Synne: '*I think little of [overdoses]. Because my tolerance is so high.'* Similarly, Asbjorn believed he was not at risk, and mainly explained it by his high level of tolerance:

> I don't know what's wrong with this body, but when I had used heroin for a while, it was like I became immune to that drug. If I shoot one gram or ten grams, it's the same. But when it comes to the younger generation, they crawl around on the floor and 'what's wrong with you', right.

Similar to Asbjorn's account, interviewees highlighted tolerance as a protective factor. For example, Vidar believed that people most at risk of overdose were those who did not know the potency of their drugs. Vidar emphasized his unusually high tolerance:

> I've been drinking three bottles with methadone, and no problem. I knew that one bottle was four deadly doses for a regular person, so I drunk 12 deadly doses. But I was just a bit tired and itched a bit.

Within the accounts of these participants were expressions about a lack of fear and a sense of invincibility, in which perceived control and tolerance were described as key in order to avoid overdose death and manage their everyday lives in a drug using environment. Thus, they described a rationality in their injecting drug use, despite associated risks. In that way, participants created boundaries between themselves and drug using peers, and did not personalize the risk of experiencing an overdose. Morten said:

> Most people I knew are dead. I survive everything. It's very strange. It has made me a bit devout in terms of our time here on earth. It's not possible to survive all the things I've survived unless you have luck or an ability to survive.

These stories illustrate how participants created symbolic boundaries, by distancing themselves from other PWID they perceived not to have the same control and tolerance. Faced with the risk of stigma and being perceived as irresponsible, these stories may be rational means to account for questioned behaviour, as well as creating positive perceptions of self to gain a sense of control. Eirik said that, in order to prevent overdoses, he usually used the same amount of drugs every time. However, he perceived himself to be at less risk than drug-using peers:

> I'm over 50 years old now, so I don't think it's possible to overdose. I've been junking for 39 years. I'm not suicidal, and I try to stick to the dose I can take. That's a high dose. Very high.

Several interviewees recounted similar stories, describing various overdose prevention strategies. Gunnar elaborated:

> I don't think about overdoses. If I get some new drugs, I mix out my regular dose, inject half of it and notice how it feels. That's how I've done it, it's a conscious thought. The body manages less well if you sleep and eat little, and I'm quite particular when it comes to sleep at night, eating breakfast, lunch and dinner. I try to maintain myself. I don't think there's any immediate risk of overdose for me.

The interviewees presented themselves as having a distinct sense of being able to handle risks, deriving from perceived control based on experience, skills and high tolerance. In this context, the risks related to their injecting drug use may seem rational. Although interviewees had overdose experiences, they expressed awareness of overdose risks. Yet, they perceived themselves to be less at risk of overdose than other PWID. In these stories, they created symbolic boundaries between themselves and other PWID who did not have control, and thus may be viewed as less rational and responsible in terms of more harmful and dysfunctional behaviour than themselves. These stories may also be functional in order to neutralize the overdose risk and to account for questioned behaviour, as well as creating feelings of self-worth and a sense of agency, and manging stigma.

Indifference towards life and death

A prominent topic during the interviews concerned stories about indifference towards overdoses, entailing a lack of concern for death or even a wish to die. Some interviewees also expressed contradictory feelings towards death. Stories were often not described as a clear wish for either life or death. Rather, the interviewees expressed shifting perspectives, both over time and during the interviews. They related these shifts to various life challenges, in which rationalized their perspective of indifference. Ole received substitution treatment, but occasionally injected heroin mixed with pills – which may increase the overdose risk. Yet, he said he was not afraid of an overdose death:

> I doesn’t really matter to me if I disappear in an overdose. Well, maybe considering my kids, it would be better to get a heart attack or be run down by a bus, which would be more acceptable ways to die. But it doesn’t matter. I’m so tired of being in this life, that

> it doesn't matter if I have a major overdose or if I survive. I don't care, it has no meaning, really. There's been way too much struggle.

Several interviewees described similar feelings of struggle and related these to their desire to be heavily intoxicated, on the edge of overdose. Oscar said:

> I've had so many overdoses, and that's totally indifferent to me. (…) That's a strange thing I have, you know, I've never had any respect for my life, so if I die, it's like 'well, nice life'.

Although many participants said that they sporadically used overdose prevention strategies, this story illustrates how interviewees also described a more general indifference to the risk of overdose death. For example, although Joakim often attended the drug consumption room, he also often injected alone, which may increase the overdose mortality risk. But he was not worried about overdose death:

> I'm tired of my life. I'm tired of the world and always drawing the shortest straw in life's lottery. I don't have much more to give. Even if I know that sounds self-pitying and weak, that's actually how it is.

Joakim's quote illustrates feelings of indifference towards death – feelings he also experienced as a bit shameful to express. The interviewees ascribed them to acute factors such as bereavements or drug treatment problems, as well as more persistent underlying challenging life factors, such as feelings of frustration, stigma, hopelessness or long-term emotional suffering. In this context, interviewees' accounts of indifference may also contribute to

neutralizing intrinsic stress as well as rationalizing their perspectives on the risk of overdose death. For example, some interviewees described drug-using peers' overdoses, which they related to indifference to death or suicide, in terms of '*I understand them'*, as Karl said. Karl believed that PWID in general have the necessary knowledge to avoid overdoses, but that indifference was a primary reason for overdoses:

> I think that people know what they need to know and are good at using this knowledge – but then it's that indifference. People can be a bit indifferent and not care so much.

Several interviewees also described more ambivalent attitudes in terms of a wish to live in combination with a wish to die, such as David: *'I wouldn't call it a death wish. More a longing for peace'*. The quote describes how David perceived the intoxication as a means to escape everyday suffering, and saw the risk of overdose as a secondary consideration.

Christina explained how she found life challenging in respect of her drug use and mental illness. She said that she did not want to die, but she could not find a solution to her problems:

> I was in a car park and had bought one gram of heroin. I was exhausted and thin. I tried to shoot the whole gram, but then a parking guard woke me up. I think I was hoping that someone would come and save me, in a way. Like, I can't take anymore, but I can't find a solution.

Christina did not describe a specific and deliberate attempt at suicide, but she had a 'risky' or ambivalent orientation towards death. She elaborated:

> It's been hell. I've been hoping that someone would kill me or… When I've got those overdoses, I've actually been quite conscious that they might happen, kind of 50/50, gambling with my life. Maybe hoping to be let go, but at the same time without intention, so it wouldn't be a selfish act.

Several interviewees told similar stories, describing ambivalence towards the wish to live and perceiving death as a possible escape from pain and life challenges. This also reflects the complex and blurred lines between intentional and unintentional overdose, and the fluctuating spectrum of intentionality. Further, some interviewees described what they defined as a longing for death and related it to their life situation, such as Stian:

> This life isn't worth living, basically. I don't live, I exist. I long for death and I'm not afraid of death. I have an extreme wish to die. I'm very tired of life. I *want* an accident to happen. I'd like to die safely by an accident, so that people won't be left with: 'What could we have done'. There are many people who commit suicide around me. I understand them very well.

Whilst some interviewees described an indifference towards life and overdose death, Stian's story exemplifies how some also expressed a more active or clear wish to die. Hanne said that her consciousness of the risk of overdose varied depending on her feelings of wellbeing and mental health. She had some intentional overdoses. However, so far she had been accidentally found and described: '*One time when I woke up, I just screamed ' 'Even death doesn't want me!' '* Further, Hakon had overdosed several times. Yet, he said that he was not afraid of death and described his thoughts after his latest overdose: *'Fuck, couldn't they just have let me be? Honestly, I'm so fucking sick of living and fighting. It's too much.'* Hakon's quote highlights

how death was perceived as less unattractive than a desire to escape feelings of hopelessness and existential pain. Such factors may play a role in the interviewees' attitudes towards the risk of death. This may also be understood as a rational reaction to the risk environment they live in, which may lead to a normalization of continually being faced with what they described as various life challenges, including overdose experiences.

To sum up, these stories illustrate complex perceptions of the risk of overdose. Many interviewees expressed a continuum of grey areas between life and death. This also reflects the blurred lines between intentional and unintentional overdose, and the fluctuating spectrum of intentionality. The interviewee's stories may also be understood as ambivalence towards life and their experiences of struggle. This was related to individual factors such as physical and mental health, but also experiences of stigma, hopelessness, or living in a high-risk environment. In this context, it is also possible to understand the accounts of indifference towards death as a functional neutralizing mechanism in order to reduce intrinsic stress and stigma.

Discussion

The analysis revealed three types of accounts concerning how the interviewees perceived and related to the risk of overdose. First, they described death as natural and a part of their lifestyle characterized by multiple hazards, and thereby neutralized the risk of overdose describing it as unfrightening. Second, they believed others to be more at risk of overdose death than they themselves based on perceived control and skills. Thus, they created boundaries between themselves and less rational PWID. Finally, they described indifference towards death, on a continuum between the wish to live and death as relief from various types of life challenges.

These stories were not mutually exclusive. Rather, they were complex and contradictory, and often operated simultaneously

All interviewees had overdose experiences and expressed overdose awareness. They described various life challenges concerning their injecting drug use, such as stigma, hopelessness, health problems, drug treatment challenges, and living in a social environment which entailed increased risks. This broad range of problems has been documented in several studies related to injecting drug use (Biong & Ravndal, 2007; Coffin et al., 2007; Miller & Miller, 2009; Rhodes, 2009). Interviewees in the current paper presented accounts in which death was described as natural in terms of being universal, and a part of their high-risk social environment. These accounts may serve several functions, such as to neutralize the seriousness of overdose risk, and to mitigate intrinsic conflict faced with the gravity of the risk of death. This aligns with other studies which show that these are adaptive mechanisms for managing stress and the overwhelming multitude of risks that PWID face (Maruna & Copes, 2005; Rhodes & Cusick, 2000).

The participant's accounts of death as natural may also neutralize the risk of being perceived as irresponsible risk takers and thus avoid stigma and feelings of otherness. For example, Maruna & Copes (2005) emphasize how neutralization techniques may serve to preserve the individual's reputation and reduce negative sanctioning. Neutralization may thus be understood as comprising dynamic cognitive processes that provide protection from feelings of shame. This is specifically important where there are conflicts between one's self-concept as a rational and responsible person and one's behaviours which might be questioned, such as injecting drug use (Aronson, 1968; Luoma et al., 2007; Maruna & Copes, 2005). In the current study, this may be particularly important considering that PWID are stigmatized both by the public and by health professionals. This is in line with studies that point to perceptions of injection as an undesirable mode of use (Luoma et al., 2007; Rivera et al., 2014; Simmonds &

Coomber, 2009). In addition to the individualization of neutralization, scholars emphasize the importance of socio-cultural factors influencing the perceptions of risk (Bartoszko, 2018; Miller, 2005). Miller (2005) emphasizes how PWID inhabit drug-using environments which often entail increased risks, creating a subculture which incorporates the dangers of drug use as behaviours which must be justified. Faced with these risks, neutralization may be both a rational and functional reaction to the drug-using environment they live in (Maruna & Copes, 2005; Miller, 2005). This also highlights how risks are social phenomena – narrated, managed and produced differently 'with some threats emphasized over others because the particular meaning they hold for a specific community or individual' (Bartoszko, 2018, p. 5).

Additionally, the interviewees recounted that they perceived drug-using peers to be more at risk of overdose death than themselves, avoiding personalization of the risk of overdose death due to factors such as experience, skills and tolerance. Within these accounts, interviewees portrayed their own behaviour as more rational in being able to control their drug use, creating boundaries and rejecting the status of dysfunctional PWID without the same skills and control. As such, they distanced themselves from drug-using peers whom they described as inexperienced or irresponsible and thus more at risk than they themselves. These findings are in line with studies showing that being able to exhibit self-control while using drugs is key in separating the functional from the dysfunctional PWID (Gashi et al., 2021; Zajdow, 2010). Copes (2016) argues that such accounts create symbolic boundaries which may have several functions, such as to form social identities and to create positive perceptions of self to gain a sense of agency of individuals' lives. Stories emphasizing rationality and control may thus show how participants in this study described themselves as different from other PWID without the same skills and moderation. Although all people engage in boundary work, it is especially important for members of stigmatized groups, such as PWID (Lloyd, 2013; Luoma et al., 2007; Simmonds & Coomber, 2009). Similar to neutralization, symbolic boundaries may also be key

for feelings of self-worth and to reduce stigma (Copes et al., 2022). In order to prevent overdoses, this also illustrates the importance emphasizing that all PWID may be at risk of overdose, despite perceptions of control, tolerance and drug-specific competence.

The interviewees further described indifference towards death related to several challenging life factors. Intentionality is a key differentiator of overdose type in the literature, with intentional overdoses associated with suicidality (Bohnert & Ilgen, 2019; Connery et al., 2019; Darke et al., 2007; Monico et al., 2021). Although literature often presents this as a binary characteristic of the overdose experience, this study shows how complex overdoses may be in terms of perceptions, feelings and attitudes towards overdose mortality. Other studies also show that overdoses are complex, with different degrees of suicidal ideation and behaviour leading to an overdose, and which are not captured within the categorical labels of 'intentional' and 'unintentional' (Bohnert et al., 2010; Monico et al., 2021).

Miller (2006) argues that suicidal attempts may be understood as an end point within a continuum of suicide-related behaviour which may include suicidal thoughts, indifference towards death. Behaviour leading to overdose may therefore be described on a continuum, with accidental overdose on one end of the scale, and conscious suicide overdose on the other. Between these points, there is a grey zone where overdoses may be understood as consequences of actions with varying degrees of intention and awareness, and where various risk factors work together simultaneously and lead to an overdose (Richert & Svensson, 2008). Consequently, despite PWID's awareness of the overdose risk, variations in perceptions of overdose death may entail the possibility 'that avoiding death, the primary logic behind overdose interventions, is viewed with considerable indifference' (Moore, 2004, p. 1554) by some PWID. In line with this present study, research shows that PWID often live in a social environment of marginalization and overwhelming distress involving suicidal ideation. This also involves stigma and feelings of otherness, which may influence one's perceptions of life and motivation

to adopt overdose prevention strategies (Bardwell et al., 2019; Lloyd, 2013; Richer et al., 2013). In this context, and similar to describing death as natural or to downplay their own risk of overdose, it is possible to understand the accounts of indifference towards death as a functional neutralizing mechanism. Accepting that death is inevitable, even if not desired, showing how they have the skills and knowledge to not overdose, and having a death wish due to long term suffering may also illustrate how participants perceived their decisions as rational, which may contribute to reduce intrinsic conflict or reduce stigma.

Moreover, to understand overdoses, it is essential to recognize how PWID perceive and relate to risk behaviour, as well as the social environment 'in which manifold social forces' (Rhodes, 2009, p. 25) may lead to increased risk behaviour and undermine harm reduction strategies. This may also say something more profound about structures and social forces that might shape the participants accounts and allow us to understand them as both reflective of, and reproductive of broader political, social and legal contexts which may hinder to address key factors in overdose deaths. Here, concepts of indifference towards life and death are also key to understanding the complexity of overdose mortality. This also highlights how health consequences, on which many overdose prevention strategies are based, are not necessarily the most important priority in many people's lives. A better understanding of overdose perceptions would allow the development of a range of preventive strategies adapted to a variety of realities.

Declaration of interest

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