

“My first 48 hours out”: Drug users’ perspectives on challenges and strategies upon release from prison

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Abstract

Background Prisoners report much higher prevalence rates of drug use and more harmful patterns of use than the general population [1]. People who use drugs have also an above-average experience with the criminal justice system in general, the prison system and the subsequent release situation in particular. Release from prison is associated with increased mortality rates among drug users due to the risk of overdose [2–5]. The EU-funded project ‘My first 48h out’ aimed to address the gaps in the continuity of care for long-term drug users in prison and upon release and had a special focus on drug user’s perspectives on challenges upon release.

Methods A multi-country (Belgium, France, Germany and Portugal) qualitative study was set up to explore drug users’ perceptions of drug use and risk behaviour upon prison release, experiences of incarceration, knowledge of risks and overdose prevention, individual risk reduction mechanisms and strategies to avoid risks when being released. Therefore, interviews and focus groups based on a semi-structured interview with (ex-) prisoners in four countries were implemented.

Results 104 (Ex-) prisoners pointed out that there are a lot of challenges for people who use drugs at release from prison. Mainly named are a lack of housing and employment support and also a complex administrative procedure regarding services, health insurance and welfare benefits. Beside these structural challenges there are individual challenges like old habits, drug use (overdose) and the situation outside prison. As a result of a lack of support (ex-) prisoners use individual strategies to cope with the risks and challenges at release.

Conclusion There are measures to prepare prisoners for release, but mostly they do not focus on individual and specific challenges of people who use drugs. Mainly psychosocial and medical support need to be improved and adjusted inside and outside prison. To implement measures the individual needs and strategies of people who use drugs should be utilized, as they show the specific needs of drug users at release.

Background

Prisoners report much higher prevalence rates of drug use and more harmful patterns of use than the general population [1]. Lifetime prevalence among prisoners in the European Union for using any illicit drug before imprisonment is estimated between 16% (Romania) and 79% (England, Wales and the Netherlands), and between 15% (Finland) and 39% (Spain) for using heroin [6]. Up to 37.8% of all prisoners declared having injected drugs at some point in their lives; while up to 31% declared having injected drugs during imprisonment [6]. Due to the worldwide criminalization of people who use drugs, even if drug use is not a criminal offence in most European countries, most regular opioid users have multiple experiences with the prison system. As a result, people who use drugs have an above-average experience with the criminal justice system in general, the prison system and the subsequent release situation in particular [7].

Release from prison is associated with increased mortality rates among drug users due to the risk of overdose [2–5, 8, 9]. Sixty per cent of all drug-related deaths occur within 12 weeks after release from prison [3]. In England and Wales, released female prisoners were 69 times more likely to die of drug-related causes during the first week after release, while released male prisoners were 28 times more likely to die than people from the general population of the same age and gender [2]. In particular, the immediate period after release is a critical period for action, when cooperation between health care in prison and in the community, and social services is the key factor to ensuring continuity of care (throughcare) [10]. Targeted interventions can save lives and build pathways towards engagement in further treatment and recovery [11]. Coordination and continuity of care still need to be improved in many countries [12]. Preparing prisoners for release starts inside prison and needs to be continued after release, without interruption of medical care and social support. Anecdotal evidence shows this is not the case in many countries, due to patchy networks of services and ad hoc provision of such services at the level of single prison establishments, resulting in enormous differences between regions and countries around Europe [13].

The multi-country research project ‘My first 48 hours out – comprehensive approaches to pre and post prison release interventions for drug users in the criminal justice system’ (2017–2019) funded by the European Commission aimed to address the gaps in the continuity of care for long-term drug users in prison and upon release. This has been done by promoting life-saving interventions for the prevention of overdose and reducing risks related to drug use and by establishing treatment pathways that are not interrupted upon release. This paper focuses on the perceived continuity of care as experienced by drug users who are/were imprisoned and on their perspectives of the challenges associated with release and strategies applied to initiate/maintain recovery beyond the prison walls.

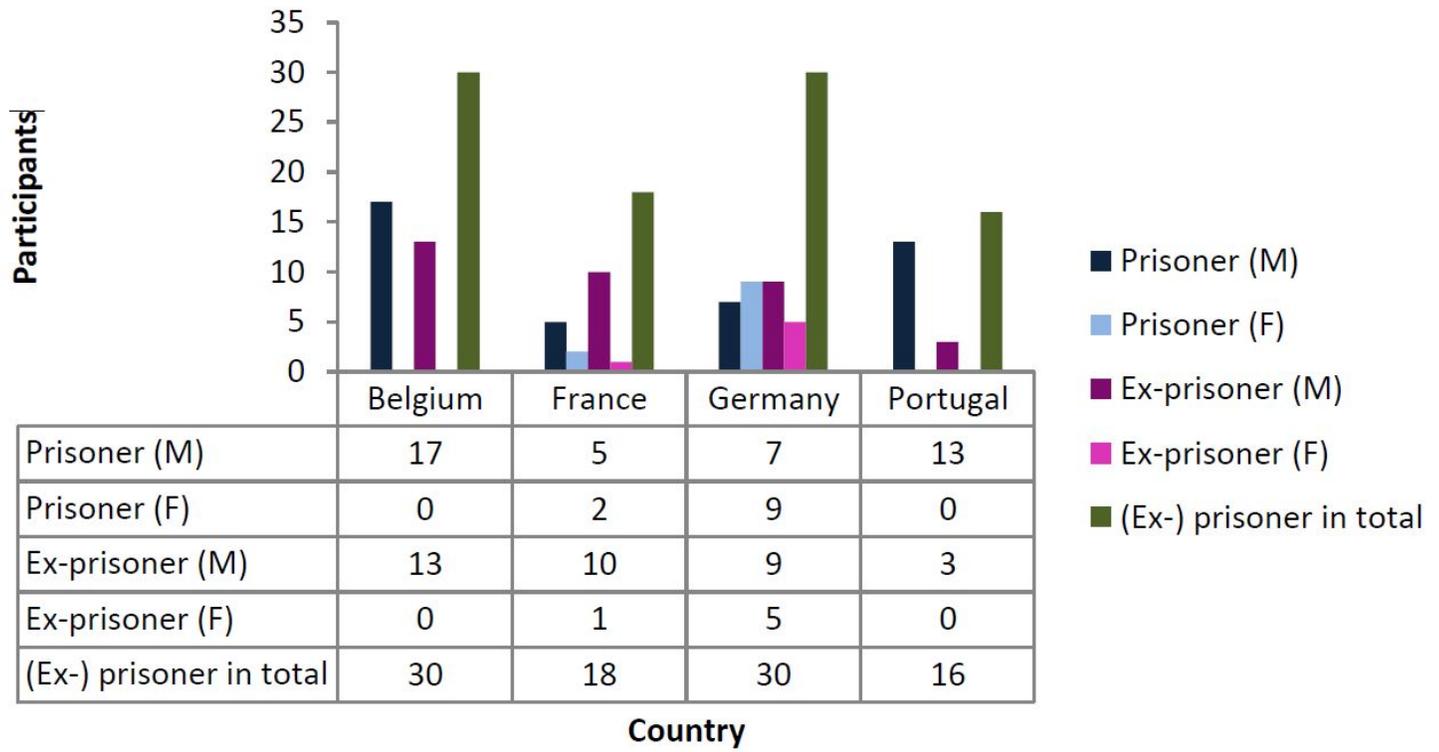
Methods

A multi-country (Belgium, France, Germany and Portugal) qualitative study was set up to explore drug users’ perceptions of drug use and risk behaviour upon release from prison, experiences of incarceration, knowledge of risks and overdose prevention, individual risk reduction mechanisms and strategies to avoid risks when being released. The choice of these four countries was based on the one hand on the diversity of policies towards drug use management and care in prisons in the North, Center and South of Europe and on the other hand on experiences of previous successful collaborations between the four research teams.

Sample

The study sample consisted of 67 prisoners and 37 former prisoners, 104 (ex-)prisoners in total, 16 women and 88 men. Female prisoners are more difficult to reach in prison because they are under-represented compared to male, and female respondents could only be interviewed in France and Germany. The average age of the participants was 36.7 years (range 19 to 54 years). The interviewed prisoners and ex-prisoners had served on average 5.3 detention periods (range 1–35) and spent a total of

86.4 months in prison on average (range 1–336 months). Former prisoners had been released from prison for an average of about 2.2 months at the time of the interview. The primary drugs used by most respondents were cocaine and heroin, often in combination with other drugs like crack, amphetamines, ecstasy and cannabis.



Procedure

The research took place between May 2017 and August 2018 in six prisons in four countries (two in Germany, two in Belgium, one in France and one in Portugal) and in several services that support people who use drugs (in prison), e.g. inpatient and outpatient drug treatment centres, low-threshold services and opioid substitution treatment ambulances in the community, prison health, and social services.

Prisoners were recruited through prison staff after the researchers received authorisation for the interviews in prisons. While the researchers in Belgium had direct access to prisoners to inform them about the study, the researchers in France, Portugal and Germany had to rely on professionals inside prison to approach eligible interviewees. In order to be eligible for the study, prisoners had to meet the following criteria: being a recent and/or regular user of illicit drugs (other than cannabis), having served at least one prior prison sentence, master the country language sufficiently to do an interview, and being available and willing to participate in an interview. Recruitment strategies were different within the four countries according to the diversity of policies, but the criteria of eligibility for participants and the methodological tools used were the same, in order to perform a comparative analysis.

In all cases, eligible participants were informed in various ways about the project (e.g. personal contacts, flyer) and participation was completely voluntary. In case individuals were interested, they signed an

informed consent form and the interviews could take place immediately or at a fixed moment in a room without the presence of staff, video or any other control measure.

Former prisoners were recruited through treatment and harm reduction services in the participating countries. These organisations were approached via email, telephone and personal contacts to help with the recruitment of recently-released prisoners (up to five months maximum). In some cases, flyers were distributed in these organisations, so that ex-prisoners could contact the researcher or the organisation's social workers if they wished to participate in the study. Former prisoners were eligible if they had served at least one prison sentence (the last one maximum of five months ago), were recent and/or regular users of illegal drugs (other than cannabis), spoke enough Dutch, German, French or Portuguese to participate in the interview (according to the native language in each country), and were available and willing to participate in the study.

All interviewees participated on the basis of the informed consent on a voluntary basis and could stop the interview at any time. In all cases, the informed consent form was explained before the start of the interview. Individuals were informed that there was no obligation to answer all questions. If the person agreed with the content of the informed consent, he/she could sign the form and the interview could start. Nearly all interviews were recorded using an audio recorder. Afterwards, the interviews were transcribed and anonymised. Only in Portugal some interviews had not been recorded, since there was no authorisation to do so. In these cases, the interviews were directly documented by the interviewer. After the interview or focus group was completed, participants received a small incentive (10 Euro) in the form of cash, gift vouchers or tobacco for participating in the study.

Instrument and data-analysis

Prisoners and former prisoners were interviewed using a similar semi-structured interview. In addition, focus groups were organised. The different methods were used to obtain both individual methods and statements within the individual interview and also to stimulate discussion within a group. The questionnaires used for the semi-structured interviews were translated and identical in the four countries.

Based on a first content analytical analysis, a tree structure has been developed for structuring the data analysis across all four countries. The themes and subthemes were selected in close collaboration between the researchers from all four countries. Data-analysis was performed using the qualitative software program NVivo, by assigning meaningful text segments (nodes) to the tree structure. Perspectives and experiences of (ex-) prisoners were analysed thematically in each country and then merged into one analytic framework.

Country-specific results were discussed in separate country reports and were not considered in this report. Due to anonymity quotes only have the information sex and (former)prisoner.

Results

Challenges upon release

(Ex-) prisoners make clear that it is very difficult, especially during the first days and weeks, to be back in the rush of present-day society and get 'up to date' with the latest developments. The longer one served a sentence, the more difficult it is, according to some (ex-) prisoners. It feels like an enormous confrontation with the speed and time pressure in our society, which is a huge contrast with the 'order and rest' in prison, where nothing seems to change. Handling the first days outside is very hard, according to the respondents, and some have the feeling that they have to learn again how to live and to organise their daily new routine and especially how to behave in interaction with other people in society.

"(...) at the same time it is confusing, we are closed in here for so long that it seems that we no longer belong to this world" (Male prisoner)

"After seven years I went outside and it seemed that I did not know how to walk." (Male prisoner)

Immediately after release a lot of things are expected from ex-prisoners, like administrative organisation, making contacts with people in the society and managing a life outside prison. In this regard, respondents indicate a lack of internal motivation in order to approach services and engage in activities, or that they struggle to accept support.

One of the major social expectation was to cling to old habits, 'automatic reflexes', in order to cope with the transition, which meant turning to their previous activities and environments, such as drug use, friends who use drugs, or a criminal environment. Returning to former social networks, when they mainly comprise people working in drug trafficking and drug dealing, is most commonly related to being a consequence of a difficult time after release.

"According to me, the big challenge is to reconnect with people. Again, it depends. If the person has done three months, that's fine. But for people who have done more than a year, (...), it is not easy to take a crowd bath. Stuff that's stupid, simple. The stress, the cars driving, all the noise. All that stuff is kind of stressful. The person may be led to consume just to calm down, for a start." (Male former prisoner)

Also the social network could negatively impact the release experience in a different manner. The negative emotional experience towards family or friends who the ex-prisoner does not meet after release, fear of stigmatisation from social networks and a lack of social network are reported as negative experiences upon release. The absence or attitude of some close relatives can lead to strong disillusion.

"Upon the last release, I had to see my family who were supposed to pick me up, they didn't pick me up, and it didn't go well. I had emotional expectations, I thought I'd see them, they didn't come. (...) At this moment I was out of my mind. So what did I do? I started using again. I didn't go to my treatment centre so I was on the run and I eventually came back here [in prison]." (Male prisoner)

As a consequence, the interviews show that the main fear of the participants is a relapse after release because some of them expect from themselves that they will not have the capabilities to address successfully the difficulties and challenges regarding the early days after release.

In addition to challenges at the individual level, structural bottlenecks may additionally complicate individuals' reintegration after release from prison. Housing and employment are usually major challenges. Having sources of support in the community (like drug aid systems, friends and family) is seen as very helpful in terms of financial support as well as for providing shelter. Arranging paperwork is also a major challenge in the first days after release. Accessing health insurance and getting OST legally after release appear in the interviews as being particularly difficult. Finally, respondents mention mental harm from prison, sometimes the wish to go back to prison, and a lack of coordination and attunement between medical and psychosocial support services inside and outside prison.

As mentioned above adequate housing is one of the major challenges after release. Some respondents indicated that they lost their flat during imprisonment and did not know where to go after release. Respondents who had no housing before reported having no improvement in their situation after release. Most of the time, participants were without any lasting housing solution, even though housing was the major concern for them. Some struggled to find emergency accommodation in shelters and some were forced to sleep on the street that rely them to vulnerability experiences. Others managed to prepare accommodation in treatment centres specifically designed for ex-prisoners with a history of drug use, or in low-threshold drug treatment centres. Finally, a few participants were given the possibility to reside in private accommodation. Interestingly, obtaining a private room was seen by some as a double-edged victory, as it gave them a sort of confidence and it made them drop their guard regarding their dependence on drugs, especially after the first time they were released.

"I've always had a roof over my head and I cannot handle it at all. Sounds stupid, but to live on the street, that's... I almost voluntarily go back in (crying) before I'm scared every day on the street that something happens to me while I'm sleeping somewhere." (Female former prisoner)

"I want to treat myself, I want to feel good so I can go on with my life properly. For that, I play the safety card. This autonomy card, i.e. moving into an apartment on your own, quickly, so to speak, I don't feel it especially. What I need is to feel it, to have a comfort zone. In prison, I have a comfort zone, I don't need to worry. Being at home with my parents, I might not need to worry, I would feel useful and gradually, I think I would take my life back." (Male prisoner)

Another major challenge after release according to (ex-) prisoners is a lack of support regarding the labour market and employment. Respondents indicated that it is very hard to get a job opportunity with a criminal record outside prison. Employment is often seen as an important part of reintegration because of daily structure, performing a task in the community and provides financial income. Mostly respondents reported a lack of support regarding measures that can help the situation in the labour market and a lack of possible jobs outside.

"Accommodation, economic situation and employment. This is altogether, everything related, employment in the middle and the others side by side." (Male prisoner)

Administrative procedures were also mentioned by interviewees, especially in regard to complexity and tediousness. To get the basic services such as identity documents, health insurance and welfare benefits, it is necessary and important to have a good understanding of the administrative organisations and a stable life routine. They often started these procedures from zero: with no fixed address, no bank account and no proof of ID. Therefore, it made a usually laborious task a seemingly impossible one, and brought disappointment or frustration.

“There was someone here [on the drug-free wing] who knew he had to wait another three weeks before he could go to K [a therapeutic community]. Instead of saying we'll keep you here for another three weeks, no, no, that day he had to leave [prison] and then he had to wait outside before he could go to K. That boy went outside and started using (again). K.: we'll see later about that. That boy came back [in prison] a month later. Then he had to wait six months again [before he could go back to K].” (Male prisoner)

Finally, some (ex-) prisoners described a huge gap between the support they received inside prison and the support they got once out of prison. They experienced a difficult transition from relatively accessible, regular and well-defined support inside to a more volatile and sporadic support outside. It was as if the care inside was somehow ‘passively’ received, and health care outside prison requires much more motivation, implication and active search. A treatment gap observed regarding opioid substitution illustrates this problem: in prison, users are called into the medical unit to be given their treatment each day, and a strict routine is installed, but once they are released they need to find a way to obtain OST without health insurance, and sometimes without prescription. If some medical units in prison sometimes give out treatment for two or three days on the day of release, it was rarely enough to make the bridge between prison support and that provided in the community.

“The problem is that I only had two days' worth of methadone on me and since I had to go to the third day [at an addiction treatment centre], not having treatment anymore [...] could be complicated. So the evening before, I took half of the treatment and saved the other half for the morning. But it's true that in the evening, I wasn't very well and I went back to my neighbourhood. I used, I smoked a little heroin to remove the craving. It wasn't really a desire I would have had if I had had all my treatment. But that's the way it went down.” (Male former prisoner)

Regarding negative experiences at release, according to the respondents, a frequently heard story is that they are released unexpectedly, especially in cases where there was a short prison sentence. The release date is not known in advance, so ex-prisoners often end up on the street all of a sudden. They also reported very often that they had no support and were ‘kicked out’ of prison only with a bag and no plan to go. Some indicated that they would rather stay inside than being released without a plan.

The majority of respondents indicated that preparations for release are often minimal. Most (ex-) prisoners felt uncomfortable on the day of release because of uncertainty feeling linked to not knowing what situation they would face afterwards. Some indicated that they lost their flat during imprisonment or found their flat in bad condition after release. In some cases respondents reported that they were released on a Friday and that they had to wait until the next weekday for their OST. Most respondents indicated

that they went or would go to shelter homes or low-threshold drug treatment centres after release, which were associated with drug use, dirt and unhelpful contacts. On the other hand most respondents found a place to sleep in these places and reported useful contacts made with social workers and the possibility of accessing OST.

If a prisoner serves a short sentence or chooses to serve the whole sentence (without being released early through provisional or conditional release), no reintegration plan is made with the prisoner in most cases. When they are handed a longer sentence, they are entitled to parole and exit permissions before release, which makes it easier to make the necessary arrangements. (Ex-) Prisoners indicated that they can work on a rehabilitation plan in that case: searching for a house, doing paperwork, looking for a job and restoring ties with the family are things that can already be picked up before release.

Reasons to use drugs at release

Most participants recalled having used drugs in the two weeks following their last release. Using drugs at release could be considered as a strategy to cope with uncertainty and stress caused by the fact that the release was not well prepared.

They pointed out the differences between the mindset they had before release and the one they had right after regarding their consumption: even when they are convinced they will stick to the treatment and not use again, they gradually make one concession after another and they very quickly find themselves in the same situation that they were in before incarceration. They mentioned an evolution between the first releases from prison they experienced and the subsequent ones: when they were younger, after release they felt the need to 'party' for two or three days, to compensate as quickly as possible for the privation they endured during incarceration, then they tend to be more careful about it and distrust this urge because the switch towards regular drug use could happen 'in a flash'. (Ex-) Prisoners indicated that boredom and being without housing is an important pitfall to starting using again or continuing after release.

"First of all, a roof over your head, because to 99.9 per cent there is a chance that... Who wants to live on the street? As a drug addict you will relapse because they cannot cope with that to deal with that and maybe feeling better, even though it's the wrong thing to do [...] feeling stronger at the moment." (Female former prisoner)

The importance of a daily schedule and having something to do (a job, hobbies) is often quoted. Another pitfall for relapse is having contact with the (old) user network. Often, there is no other (drug-free) network on which one can rely the days following release. These often include people who use drugs and thus are seen as acting as an inducement to use again. People returning to their old neighbourhood to seek social support feared that they would run into a friend who was still using and could easily provide some drugs. Shelters providing emergency accommodation also increased the chance of meeting people who use drugs and were considered by the participants as a risk factor for relapsing into drug use. Also, when one is lonely and there is no (social) support at that moment, the step towards drug use is quickly made.

"I was released and I wanted to pick up again the outpatient drug treatment I had before detention, but my therapist was on leave. So, I wanted to work on it for three weeks, but I couldn't and then I lost control. I had a relapse. I met an old friend who was still using speed and ... Last time I was free again and I did everything well: I requested financial support and got two weeks of support. But the third week they told me I had to find my own way. I went back to my brother and used drugs, I shouldn't have done that. But it is difficult if you are in that circuit. Certainly if your brother is a user, most of my family are users ... Where can I go? You're in the middle of a struggle... You come out, have no home, I could stay with my brother, but I was also alone there, so what do you do to be able to talk to someone? I went to my cousin, but he also used drugs there. I lost myself. I thought I could handle it, but first it is one line [of coke], another line half an hour later and like this you're back again on drugs." (Male prisoner).

Participants pointed out that inactivity immediately following release was an additional risk factor for drug use. Even when health support or administrative procedures were initiated, they report long periods of waiting for the social or medical support to move forward. During this post-release period, they often lack a sustainable housing solution and cannot seek employment as their administrative situation is not in order yet. Given this context of uncertain outcomes and difficult transition, great amounts of unfilled time seemed to add anxiety or disorientation.

Some interviewees indicated a very strong motivation inside but a high craving after release. Also being 'clean' (especially after no access to OST inside) is an important pitfall to using drugs outside. They 'need' some drugs and a 'good cocktail' (cocaine and heroin at the same time) after release. In some cases, there was excessive consumption after release, in other cases less than before imprisonment.

"And these thoughts you had, what to do after release. Work, new life, looking for a flat and this and that. All this just disappears on the day of release. You'll forget that soon after you leave the prison a few yards away. That's so bad. That is madness. And then again and again drugs." (Male former prisoner)

"But sometimes, when you didn't use drugs for a long time, there is also craving. Then you have to satisfy the addiction. Yes, and that's that, that's a real force to do this sometimes." (Male prisoner)

Difficulties (ex-) prisoners encounter when arranging things, such as employment and housing, are not helpful either and may trigger ex-prisoners to use again. Moreover, a number of respondents indicated that if medical treatment is not continued after release (because of a lack of health insurance), relapse is very likely.

"If you have a lot of money at release and no doctor anymore (OST), so what do you do first? You think "yes OK. I'm just getting the bare necessities, so I'm not on withdrawal." And what do I do then? That does not last that long." (Male former prisoner)

Knowledge about and managing of an overdose

Most (ex-) prisoners know a lot about risk factors for overdose, while some are not aware of the risks at all. Almost all the participants learnt about overdose risks and prevention outside prison. Knowledge was

mainly transmitted outside either by harm-reduction facilities or by the participant's personal network. Regularly, the misconception was observed that one can only take an overdose of heroin. Drug users who only smoke or take heroin nasally did not know or only rarely knew of any risks of overdosing. When respondents were asked about the main risks for overdose (OD), the following factors were discussed: a mix of different drugs (such as uppers and downers), exaggerating (taking too much, too high doses in a short time, as well as overly intensive use over a longer period of time), having never used before or not having used for a long time, drug quality, lack of knowledge about the product taken, the adulteration of substances by dealers or changes to the supplier, being greedy, and being clean at release.

The majority of respondents had witnessed an overdose (OD) or had their own experiences of at least one overdose. A recurring behaviour pattern among (ex-) prisoners who witnessed an overdose is that they will first help someone who is overdosing to regain consciousness themselves, and only afterwards, when they don't know what else to do, will they try to call an ambulance. The latter is a consequence of users' fear of problems with the police and fear of punishment (e.g. being guilty of complicity, failure to render assistance to a person in danger, and so on), in case they are found with someone overdosing. Some people will run away immediately and leave the person who is overdosing alone, while others will try to call an ambulance first before they leave. Others used wet towels, first aid, fresh air or tried to inject the opposite substance (like heroin-cocaine) to manage the OD. Most of them expressed a lack of control over the situation. In all cases drug users helped the OD victim themselves with regard to overdosing in a private setting.

If respondents had an OD, they tried to call friends. Mostly they had friends around or they had overdosed in a consumption room, and one respondent woke up directly in hospital after losing consciousness, without knowing how he got there since he was alone at the time.

Individual strategies to cope with risks associated with drug use

The interviews showed that respondents have individual strategies to cope with risks associated with drug use. These coping strategies exist on an individual level but some strategies are often mentioned.

Some (ex-) prisoners indicated that it was helpful to change their lives. Changes in social life (daily structure, work, leisure time), contacts (friends, dealers) and housing were reported as being particularly helpful for changing drug use patterns. In the community, too, this strategy is applied and experienced as helpful: (ex-) prisoners break their contact with drug users and stay away from their old neighbourhoods. Having (new) clean contacts is definitely helpful. Some also reported a need to know about their own risk factors for drug use, while some also indicated that a realistic view is helpful (abstinence is not possible for them).

"Hand on heart, I cannot do it without a substitute. What's so reprehensible to say I cannot do it. That's it. And I live with it legally and I can live with it. And I can also build a life for me with substitute. And that's what I recognised. And not thought, what do others think? And I filed that. I do not care what others think, that's my life." (Female prisoner)

Some (ex-) prisoners stated that they intentionally avoided visits from some people in prison (e.g. friends) to protect themselves from having drugs brought in. Another strategy to stay away from drugs in prison is having something to do. Participating in organised activities such as fitness, sport and cooking help prisoners to relax, reduce stress and distract their thoughts. According to several respondents, having a structure (with daily tasks and activities) is also very helpful in the outside world.

*"I want to change my life for myself, so I stay away from the people who are still using drugs here."
(Female prisoner)*

According to several respondents, having a person of trust and/or children is of great help outside prison. Carefully preparing for someone's release is seen as a necessary condition. Several prisoners indicated that someone is lost when arrangements are only made upon release. Moreover, (ex-) prisoners state that it is important to find a way to cope with the prison period and to recover from the stress they experienced in prison.

"They (fears of overdose after release) really exist and I thought so too, because I'm scared, but the only thing that helps me that I do not consume is when I go to my children. I know that I will not consume because when my children are there, their presence always makes me forget everything else." (Female prisoner)

In individual cases, the (ex-) prisoners had strategies like setting small goals for themselves, regular withdrawal, organising finances and administrative things before taking drugs after release.

Harm reduction individual strategies were named regarding overdose. Respondents indicated that it is common sense not to use too much or to take overly large dosages. A proven strategy is to stick to a certain dose. Another respondent states that you should only use one third of the normal dose if you haven't used for a long time. It is recommended to build up consumption gradually, first by using a little bit and then a little more later to reduce the risk of overdose, and/or to use a different way of taking drugs immediately after release, such as smoking instead of injecting.

"To use the drug in moderation. If I want to eat everything at once, I'm bound to go down. After using, wait a bit." (Male prisoner)

"If I use drugs, so inject I do me half (of the usual dosage) or less than half and then I wait, what happens when I realise, oh, there is something wrong, then I stop." (Male former prisoner)

In addition, several (ex-) prisoners mentioned that it is important to 'know the drugs that you are using'. A proven strategy reported in Belgium is to have the drugs tested first (to know about purity and quality). An overdose can also be prevented by never using alone or using in a consumption room, in which case someone else can help you if necessary. In Portugal, respondents have specifically argued for the provision of safe drug consumption sites as a structural measure to prevent overdose.

*"Knowing what you are using. Many years ago I have seen people injecting and dying. They do not know, they think they are injecting cocaine and it is not cocaine. They do not really know what they are using."
(Male prisoner)*

*"I think there should be specific places to get these substances, where people would be medically assisted and have someone watching over."
(Male prisoner)*

*"Take less. ... and always with another person, that one is there. [...] That's the first, if you go away (use) alone and you do not know the stuff."
(Male former prisoner)*

One respondent found it helpful to have social control, like having a partner who controls use after release (by telling them 'Start using with reduced dosage').

The respondents, especially in Portugal mentioned emergency measures in case of an overdose like using salt or naloxone.

*"I've seen a person with such a problem. The boy who was injecting stood there and never got up again. The other who was smoking took salt water and stuck it in and he woke up. I also know that naloxone prevents it."
(Male prisoner)*

Finally, abstinence was also reported by participants as the best way to prevent an overdose.

Positive/helpful measures at release

Most respondents had more negative feelings regarding release than positive, except in Portugal. As expected, very few people who had a home and good contacts with family and friends mentioned these factors as very positive related to the time after release, especially regarding drug use, motivation and structure. Having 'someone who waits' in the community helped them to 'keep their mind off drugs' and was reported as being very helpful and supportive in the time immediately following release. The respondents also noted that the social network was and is the main factor in enabling an easier and more positive reintegration, since they were the ones providing for their needs on release, namely social support, housing, supplies and finances, in cases where they had a social network outside, which was not the case for the majority of the (ex-) prisoners in our sample.

*"I came to the conclusion, that family is very important for any type of rehabilitation or reintegration, because they support such basic things as food or housing."
(Male prisoner)*

Some respondents associated release with the sense of freedom.

*"The moment of departure is a unique moment, so much joy that no matter how angry you are you forget everything. I did not miss anything [regarding the incarceration period]. I missed things when I was in prison. When you walk out the door, you have access to family, the most beloved ones. (...) The door being open is all good."
(Male prisoner).*

On a structural level, the respondents reported very different experiences. As mentioned before, the majority of (ex-) prisoners had bad experiences, but some also had good ones. Besides housing, the major protective factor according to the respondents was finding a job after release. Work was associated with strong and varied support, since it was linked with reinsertion, the provision of an income stream and, most of all, an occupation. One of the ex-prisoners even presented the work as a way to 'find exhaustion at night', and to get back a normal 'rhythm' into his life.

Regarding access to health care, some participants conveyed positive experiences of coordination between professionals outside and inside prison, allowing them to feel more secure just before and after release. Some mentioned the leave they obtained from the prison administration to go and visit long-term residential treatment centres for a day. A prescription sheet provided before release by the medical unit in prison and/or treatment centre providing free OST or OST for self-payers was mentioned as highly practical and reassuring by the interviewees, as receiving OST is one of the major challenges after release if they have no health insurance.

Some respondents referred to the training inside as a positive element for reintegration, including receiving information and identifying interests (for leisure time) for outside. Besides training inside, some respondents mentioned that the therapeutic community is a positive after release, in terms of the opportunity to meet other people who had recovered and were leading their own life autonomously.

"(...) there I worked with medical therapists, did small community work and then would move to live in an autonomous reinsertion home. I felt it was important, I met people who recovered and went there at weekends to talk about what they had already achieved." (Male prisoner)

Some (ex-) prisoners indicated positive preparation for release. This was often associated with therapy after release or a special support like a social worker outside, transition management or family and friends. Only a few reported that they had the possibility for open prison measures, and many indicated that these measures were helpful for training for life outside.

Discussion

Our findings show that people who use drugs in prisons are facing specific and substantial challenges at the point of release from prison and are starting to implement strategies to cope with the individual and structural challenges, if preparation for release is low.

Individual and structural challenges have effects on the drug use in prison and after release. Throughcare, the continuity of medical and psychosocial support before, during and after imprisonment reduces the risks of relapse and overdose at release [15]. The provision of throughcare is an important measure especially for prisoners with multiple health and psychosocial needs to reduce their drug use [16] and to increase their chances of re-integration after release [17]. The results of this study clearly show the multiple needs of drug user in prisons and in particular at the point of release. Drug use and

medical treatment is just one part besides complex psychosocial needs like housing, social support and day structure [7, 9, 18].

The continuity of opioid substitution treatment (OST) is perceived as having a positive effect on the reduction of drug use and risks relating to drug use. (Ex-) prisoners mentioned the fact of losing OST or receiving a lower dosage as a risk to use in prison or directly after release. Next to the treatment inside prison the continuity of care after release is important for the success of the treatment. Studies and guidelines show that medical treatment with OST can reduce the risks of relapse and overdose at release and should be a part of health care for prisoners who use opioids [9, 19–21]. In this study all countries provide OST, however, dosage and coverage differs between countries and between regions and prisons within the same country.

Besides the provision of OST providing Naloxone is an important measure to prevent drug-related death from overdose. Naloxone is an opioid antagonist capable of reversing overdose due to opioids, such as heroin or prescription opioids. Naloxone has been available, on prescription, to at-risk drug users and their family/friends since 1999 through selected programmes around the world [22]. One good practice example is Scotland where naloxone is a part of overdose prevention at release [23, 24]. A study shows that providing drug users with naloxone at release can reduce the overdose death after release [25]. In this research only France provided naloxone and training for overdose prevention before release. In the other countries there was no legal access to naloxone. Despite promising experiences reported in Scotland and other parts of the world, this strategy of mortality prophylaxis is widely neglected. The use of opioids is the main cause of post-release mortality [3]. As the findings showed most people who inject drugs know about the risk of overdose but also showed that they need more information to manage an overdose.

In addition to medical support like OST and Naloxone, the findings clearly showed that psychosocial support is the most important support to prevent drug use and overdose at release. As medical treatment could be provided to all drug user in the same way psychosocial support needs to be provided individually. Mainly preparation for release as a part of throughcare is a key to successful reintegration [9, 15]. Preparation for release as part of throughcare includes needs assessment and key elements like health, family, finance, housing and employment [15]. The findings of this and other studies showed challenges at release that are complex [26, 27]. In our findings there are challenges on a structural and individual level. On a structural level housing after release is the most important and at the same time least available resource after release followed by employment and administrative procedures. On an individual level a lack of daily routines, stress and a lack of (non-drug using) social networks are named as challenges at release. Positive stabilising factors include the start or continuation of treatment after release, or the provision of special support such as a social worker outside, case or transition management, or family and friends. Also the reduction of boredom, stress and loneliness seems to have a positive effect on drug use. The more suitable measures like offering a daily routine, meaningful occupation and work, and the organisation of collective events are introduced, the more drug use will be reduced. The findings showed that individual preparation for release seems to be very important for prisoners who use drugs to cope with the challenge which leads to relapse and overdose at release. Most

(ex-) prisoners have an idea of their own individual challenges so they developed individual strategies to cope with the risks at release, even though they pointed out that social support (social worker, family, friends) is the most important strategy.

Limitations of the study

In general, all countries faced several challenges in recruiting (ex-) prisoners. There were some difficulties with different ministries of justice and access to prisons or carrying out research (interviews and focus groups) with prisoners. There were also some difficulties finding ex-prisoners in some countries. Even if all countries faced different challenges we succeeded to conduct the survey in all prison settings.

One of the main limitations is that the sample is not diverse. Only Dutch-, German-, French- and Portuguese-speaking (ex-) prisoners, in very few prisons (two in Germany and Belgium, one in France and Portugal) and drug treatment centres were eligible for this study. The (ex-) prisoners were mostly selected by the contact person in the prisons and organisations, except in Belgium and Portugal. It cannot be ruled out that there was any previous selection process. Female prisoners were included only in Germany.

In addition, the sample of ex-prisoners may be biased by the fact that only individuals who were already in contact with some type of service were recruited. It is possible that former prisoners who were not involved in these services or have been involved in different services (low/high threshold) have other experiences after release.

Conclusions

In most of the prisons studied measures to prepare prisoners for release do exist, however mostly they do not focus on individual and specific challenges of people who use drugs. Mainly psychosocial and medical support needs to be improved and adjusted inside and outside prison. To implement measures the individual needs and strategies of people who use drugs should be utilized, as they show their specific needs.

Risk behaviour regarding drug use upon release and overdose risks needs to be discussed with prisoners before release. Prevention programmes, especially inside prison, need to address knowledge and support for prisoners to cope with fear of peers, boredom and other factors which lead to drug use inside or relapse/overdose upon release. Individual coping/harm-reduction strategies implemented by any (ex-) prisoner and knowledge of existing programmes should be used to develop suitable measures. In order to adequately respond to this challenge, a range of services needs to be introduced:

- Realistic information, education and communication (IEC) strategies to point out the risks of relapse after release (especially peer-driven-interventions)
- Improved connections between health and social services provided inside and outside prison
- Continuity of medication-assisted treatment of opioid-dependent prisoners

- Re-uptake of medication-assisted treatment for opioid-dependent prisoners before release (approximately six months)
- Training on the management of drug-related overdose and the provision of naloxone kits before release [24].

There are also some strategies to be taken on an individual prisoner level upon release to prevent relapses. The availability of a positive social network with friends, partners, family members is definitely a stabilising factor that needs to be prepared for prior to release. This also includes opening measures to get used to the society again before the day of release. Regarding different measures, the main focus during development and implementation should be on the specific needs of prisoners inside prison and at release to meet every need.

On a structural level, more efforts have to be taken to organise easy administrative procedures for reintegration into employment, housing, and stable and continuous medication, if needed. Reintegration into health care in Germany and France in particular needs to be improved. The example set by Portugal, where there is no delay to gaining free access to the usual treatment, needs to be followed.

In order to reintegration a range of services and measures like Continuity/providing of psychosocial care, transition housing or special housing for drug user after release, specific measures in addiction help centres to focus on challenges at release and cooperation between social services inside and outside prison need to be introduced.

List Of Abbreviations

OST – Opioid Substitution Treatment

Declarations

Ethics approval and consent to participate

Ethical issues have been discussed throughout the whole research project. In France ethical approval of the study had to be achieved. For France an agreement from CERES (Paris Descartes Ethical Committee) was obtained (no. 2017-44). For Belgium, ethical approval was provided by the Ethical Commission of the Faculty of Psychology and Educational Sciences at Ghent University. Approval was, according to the ministry of justice, not necessary in Germany and Portugal.

Guaranteeing anonymity was a major prerequisite in this study. In the interviews, sensitive data and information (e.g. about drug use in prison) was provided by the interviewees. This made the anonymisation process urgently necessary. Data and information provided in our reports can neither be allocated to a certain prison nor to individual prisoners.

Consent for publication

All authors agree with the content of this manuscript and have given consent for publication.

All authors declare that they have no conflict of interest.

Availability of data and materials

The datasets generated and/or analyzed during the current study are not publicly available in order to protect participant confidentiality but are available from the corresponding author on reasonable request.

Competing interests

Not applicable

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Authors' contributions

DJ and HS developed the idea and wrote the manuscript. DJ, OS, AN, MH, VM and PT carried out the interviews and analyzed the data collection. WV, HS, LM, and MJR supervised the data collection and analysis. WV, LM, PT and MJR provided significant input to the edition of the manuscript. All authors have read and approved the final manuscript.

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References

1. Lazarus JV, Safreed-Harmon K, Hetherington KL, Bromberg DJ, Ocampo D, Graf N, et al. Health Outcomes for Clients of Needle and Syringe Programs in Prisons. *Epidemiol Rev.* 2018;40:96–104. doi:10.1093/epirev/mxx019.
2. Farrell M, Marsden J, Farrell M, Marsden J. Acute risk of drug-related death among newly released prisoners in England and Wales. *Addiction.* 2008;103:251–5. doi:10.1111/j.1360-0443.2007.02081.x.
3. Merrall ELC, Kariminia A, Binswanger IA, Hobbs MS, Farrell M, Marsden J, et al. Meta-analysis of drug-related deaths soon after release from prison. *Addiction.* 2010;105:1545–54. doi:10.1111/j.1360-0443.2010.02990.x.
4. Marsden J, Stillwell G, Jones H, Cooper A, Eastwood B, Farrell M, et al. Does exposure to opioid substitution treatment in prison reduce the risk of death after release? A national prospective observational study in England. *Addiction.* 2017;112:1408–18. doi:10.1111/add.13779.
5. Pierce M, Bird SM, Hickman M, Marsden J, Dunn G, Jones A, Millar T. Impact of treatment for opioid dependence on fatal drug-related poisoning: a national cohort study in England. *Addiction.* 2016;111:298–308. doi:10.1111/add.13193.
6. EMCDDA. Prisons and drugs in Europe: the problem and responses. Luxemburg; 2012.
7. WHO. Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence 2009.
8. Lyons, S., Walsh, S., Lynn, E., Long J. Drug-related deaths among recently released prisoners in Ireland, 1998 to 2005. *International Journal of Prisoner Health.* 2010;6:26–32.
9. WHO. Prevention of Acute Drug-related Mortality in Prison Populations during the Immediate Post-release Period. Geneva: World Health Organization; 2014.
10. Stöver H, Jamin D, Michels II, Knorr B, Keppler K, Deimel D. Opioid substitution therapy for people living in German prisons-inequality compared with civic sector. *Harm Reduct J.* 2019;16:72. doi:10.1186/s12954-019-0340-4.
11. Martinelli TF, Nagelhout GE, Bellaert L, Best D, Vanderplasschen W, van de Mheen D. Comparing three stages of addiction recovery: long-term recovery and its relation to housing problems, crime, occupation situation, and substance use. *Drugs: Education, Prevention and Policy.* 2020:1–10. doi:10.1080/09687637.2020.1779182.
12. Vanderplasschen W, Bourdeaudhuij I de, van Oost P. Co-ordination and continuity of care in substance abuse treatment. An evaluation study in Belgium. *Eur Addict Res.* 2002;8:10–21. doi:10.1159/000049483.

13. Bielen R, Stumo SR, Halford R, Werling K, Reic T, Stöver H, et al. Harm reduction and viral hepatitis C in European prisons: a cross-sectional survey of 25 countries. *Harm Reduct J.* 2018;15:25. doi:10.1186/s12954-018-0230-1.
14. Stöver H, Jamin D., Sys O., Vanderplasschen W, Jauffret-Roustide M, Michel L, et al. Drug use and risk behaviour in prisons and upon release in four European countries. Overdose upon release: Challenges and strategies from (ex-) prisoners' points of view. Frankfurt am Main; 2019.
15. MacDonald M, Weilandt C, Popov I, Joost K, Alijev L, Berto D, Parausanu E. *Throughcare for Prisoners with Problematic Drug Use: A Toolkit.* Birmingham; 2012.
16. Holloway K, Bennett TH, Farrington D.P. *Effectiveness of Treatment in Reducing Drug-Related Crime.* Stockholm; 2008.
17. Møller L, Stöver H, Jürgens R, Gatherer A, Nikogosian H. *Health in Prisons: A WHO Guide to the Essentials in Prison Health.* Geneva: World Health Organization; 2007.
18. Patel L. *The Patel report: Reducing Drug-Related Crime and Rehabilitating Offenders Recovery and rehabilitation for drug users in prison and on release: recommendations for action.* Bradford.
19. Bird SM, Fischbacher CM, Graham L, Fraser A. Impact of opioid substitution therapy for Scotland's prisoners on drug-related deaths soon after prisoner release. *Addiction.* 2015;110:1617–24. doi:10.1111/add.12969.
20. Degenhardt L, Larney S, Kimber J, Gisev N, Farrell M, Dobbins T, et al. The impact of opioid substitution therapy on mortality post-release from prison: Retrospective data linkage study. *Addiction.* 2014;109:1306–17. doi:10.1111/add.12536.
21. Kastelic A, Stöver H, Pont J: *Opioid substitution treatment in custodial settings.* BIS Verlag; 2009
22. Yokell MA, Green TC, Bowman S, McKenzie M, Rich JD. Opioid overdose prevention and naloxone distribution in Rhode Island. *Med Health R I.* 2011;94:240–2.
23. Horsburgh K, McAuley A. Scotland's national naloxone program: The prison experience. *Drug Alcohol Rev* 2017. doi:10.1111/dar.12542.
24. Horsburgh K. *Naloxone-on-Release: Guidelines for naloxone provision upon release from prison and other custodial settings;* 2018.
25. Bird SM, McAuley A, Perry S, Hunter C. Effectiveness of Scotland's national naloxone programme: Response to letter to editor. *Addiction.* 2016;111:1304–6. doi:10.1111/add.13391.
26. Binswanger IA, Nowels C, Corsi KF, Long J, Booth RE, Kutner J, Steiner JF. "From the prison door right to the sidewalk, everything went downhill," a qualitative study of the health experiences of recently released inmates. *Int J Law Psychiatry.* 2011;34:249–55. doi:10.1016/j.ijlp.2011.07.002.
27. Thomas EG, Spittal MJ, Heffernan EB, Taxman FS, Alati R, Kinner SA. Trajectories of psychological distress after prison release: Implications for mental health service need in ex-prisoners. *Psychol Med.* 2016;46:611–21. doi:10.1017/S0033291715002123.