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RESP

Distributing aluminium foil as harm reduction strategy among people who use drugs in prison

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ABSTRACT

Objectives: Drug use via inhalation substantially reduces the risk of overdose and blood borne infections when compared to parenteral consumption. In order to promote a change in consumption habits and provide a safe framework for inhalation consumption, the distribution of foil was introduced into the Catalan prison, Brians 1. The aim of this study was to know the perceptions of the people who participated in this program.
Material and method: An exploratory qualitative study was carried out through semi-structured interviews with 18 users (11 men and 7 women, one of them transgender) aged between 23 and 55 years. The data was analyzed using thematic analysis methodology.
Results: Users highlighted the fewer negative consequences arising from inhalation drug use with a foil kit, compared to other means available in prison. The kit was used for heroin consumption, as well as in the manufacture of hashish and crack pipes. Among users who normally injected, there was increased awareness of alternative means and a higher probability of drug use via the pulmonary route. All users reported having received health education and subsequent monitoring by the particular team in charge.
Discussion: Foil distribution is a practical and effective harm reduction strategy in prisons. Going forward, it is necessary to extend this program to other prisons and diversify the kits so they can more broadly address inhalation drug use.

Key words: needle-exchange programs; heroin; crack cocaine; drug overdose; HIV infections; hepatitis C; prisons; qualitative research.

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INTRODUCTION

Intravenous drug use increases the risk of overdose, blood-borne infections (human immunodeficiency virus [HIV], hepatitis B and C, etc.), and other health problems, and is associated with worse social and legal conditions than inhaled drug use[1-3].

However, inhaled drug use is not free of health risks, and may lead to lung damage, burns and lacerations of the lips and the transmission of viral (hepatitis C, HIV, etc.) and respiratory infections (influenza, tuberculosis, etc.) from sharing drug kits[4-6].

Interventions have therefore been intensified in recent years to reduce the harm caused by intravenous drug use and promote a transition towards inhaled drug consumption, such as prescribing oral replacements[3], supervised consumption rooms for administration routes other than injected[7,8] and the distribution of kits for inhaled drug use, etc[9,10].

One key location for promoting harm reduction measures are prisons, where drugs are consumed in poor hygienic conditions, with a high risk of blood-borne infections, overdose and other adverse reactions[11-13].

One response in the last ten years has been to intensify opioid substitution treatments (OST), needle exchange programmes (NEP), peer education, etc[14-16].

Spanish prisons have seen the development of harm reduction programmes in which OST has been

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made available, with about 8,000 persons undergoing treatment[17]. NEP programmes have also been operating in more than 40 prisons since 1997[17].

All prisons in Catalonia now have OST and NEP programmes and there are two treatment and monitoring centres (TMC) for drug addiction, where peer education programmes, hygienic and safe drug use workshops and other activities are carried out[12,18].

Regarding strategies to provide effective coverage to inhaled drug use, Fumando en plata (smoking on foil) was introduced at the end of 2020. This consisted of a programme to distribute lead-free aluminium foil (sheets and tubes), designed for inhaled heroin consumption, along with a leaflet with health education messages (Figure 1) by the TMC at Brians 1 prison. This intervention was driven by a growing demand for treatment for inhaled drug users and as an innovative harm reduction measure in the context of COVID-19[19].

The specific objectives were initially to reduce overdoses and blood-borne and respiratory infections in a context that involved a high risk for the users' health[6,19].

Previous studies on harm reduction community services in Germany and the UK showed the positive impact of aluminium foil distribution amongst drug users. They highlighted the fact that these programmes provide material for inhaled heroin consumption[2,20], increases awareness that smoking is less harmful than injecting[20,21], improves the likelihood of inhaled consumption instead of injecting[20-22] and promote closer contact between drug users and harm reduction programmes[2,22].

With the exception of the studies mentioned above, scientific literature on this type of intervention continues to be scarce. There are hardly any know experiences of the implementation of harm reduction programmes to adress inhaled drug use in prisons, and there are no studies in this particular context. This article sets out to fill this gap.

Figure 1. Lead-free aluminum foil kit (sheets and cannula) and brochure with health education messages.

The general aim of this study was to discover more about the perceptions of drug users about the Brians 1 aluminium foil distribution programme. In particular, we explored their experiences in areas such as functioning, patterns of drug use and possible improvements to the programme.

MATERIALS AND METHODS

We carried out an exploratory qualitative study via semi-structured interviews[23] with drug users participating in the *Fumando en plata* programme at the Brians 1 prison. The prison is a mixed one, with a capacity for 1,300 men in pre-trial custody and 300 women serving a prison sentence.

The study was designed by two authors, a nurse and anthropologist and a social educator, both with 20 years' experience in prisons and in treating drug users. A purposive sampling process was carried out to select the participants[24].

Our inclusion criteria were: men and women who inhaled or injected drugs and had acquired the aluminium foil kit. People who presented major language barriers or cognitive conditions that made the interview process difficult were excluded.

The semi-structured interviews[23] were carried out between January and April 2022. The interviews were held in offices at the residential modules and were recorded digitally with a duration of between 45 and 60 minutes. The aim of the interviews was to obtain information about use of the programme, using a script structured into five blocks related to the following:

- Access and information about the programme.
- Characteristics of drug use practices.
- Impact of the programme on health.
- Opinion of the kit.
- Proposals for improvement.

An initial design of the interview script was tried out with four participants to refine the wording of the questions to make them more understandable.

A questionnaire was also used to gather sociodemographic, health and drug use data.

The entire interview was transcribed and analysed with Braun and Clarke's thematic analysis method[25]. Assistance with the transcription analysis was provided by the NVivo 12 qualitative software, and took place over six phases:

1. One: all the transcription were read in depth for familiarisation with the gathered data. Comments and main ideas were noted down in this phase.

2. Two: the transcriptions were codified and the contents of each code were reviewed.
3. Three: the research team met to compare and unify the codes, which were grouped into themes and subthemes.
4. Four: the categories were reviewed according to the list of codes and all the transcriptions. The research team reordered the codes into a category map.
5. Five: the specifics of each category were refined and the final themes were defined.
6. Finally, the results were drafted and significant extracts were selected, which were clearly identified with the issue posed by the study.

The study was carried out under the authorisation of the Brians 1 TMC (Catalan Health Service/Health and Community Foundation). The ethical evaluation of the research was approved by the technical and project promotion management section of the Health and Community Foundation. All the participants were informed about the objectives and ethical criteria of the study, and signed an informed consent in accordance with Organic Law 3/2018, of 5 December, on the protection of personal data and digital rights guarantees, and EU Regulation 2016/679.

RESULTS

The participants were 18 persons (11 men and 7 women, one of whom was transgender). Ages were between 23 and 55 years, with an average age of 42.6 years, 15 participants were of Spanish origin. They all reported having used drugs in the last six months of their stay in prison, 9 mainly intravenously, followed by inhalation, and 9 basically by inhalation; 7 were diagnosed with HIV and 4 with hepatitis C virus, in both cases with medical monitoring; 5 had been diagnosed with hepatitis C virus in the past and were successfully treated and cured; 11 participants were receiving opioid replacement therapy (methadone) and 9 were in a needle exchange programme.

Analysis of the codes and their grouping into themes and subthemes brought to light four categories to explain the use of aluminium foil by drug users in prison:

- Access and treatment received.
- Users´practices of drug use.
- Benefits of using aluminium foil.
- Proposals for improvement.

Access and treatment received

Users indicated that they had received information and access to the aluminium foil kit via the OST and NEP programmes, and at medical consultations and socio-educational interventions of the TMC: "We found out from the one who gives out the methadone. You give the information to whoever's using" (E4); "A professional at the TMC told me" (E5).

Another channel of information was through other users. People not attached to the programme received material via secondary dispensation and some later established links with the TMC to obtain the kit themselves: "I found out from a cellmate. He told me to ask for it and then they came with the packet" (E12); "I got it from someone who was in the programme. He told me that the TMC gave us foil" (E8).

All the users stated that they had received health education and access to medical care and psychosocial and socio-educational interventions. They specifically highlighted the recommendations on hygienic and safe use of drugs by inhalation and the brief advice on changing the route of administration: "The information is handy for prevention and using in better conditions" (E16); "I like the idea of promoting foil for smoking, because I got HIV from renting a needle some years ago" (E3).

Ten participants considered the messages in the leaflets to be clear, but they felt it was better to receive the information directly from professionals: "The leaflet is OK, but it's better when they explain stuff to you" (E18); "I didn't even look at the leaflet. It's much better when professionals give you the information" (E9).

Users´practices of drug use

Users asked for the kit for consuming occasionally, normally at the weekend or subsequent days. They reported that they took drugs in the cells and sometimes in the bathrooms of common areas in the residential modules, normally accompanied by other people: "I've used crack sometimes. People share pipes in the cells a lot in the women's module" (E15); "You buy it between the two of you. The smoker invites the other for company. I take it with my cellmate" (E16).

All the users reported that they used the foil to smoke heroin. 13 of them said that they used it to make home-made pipes to consume other substances. An example of this is smoking crack with inhalers for asthma or hashish with small plastic bottles, using the foil for the area where the drug is ignited: "You smoke crack with a water bottle, either directly or with a tube" (E5); "Here they use an asthma inhaler. You put the foil where you inhale, and you put your mouth where the tube is. Basically, you use it in reverse" (E15).

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Benefits of using aluminium foil

Users expressed the wish to stop using aluminium foil obtained from food packaging (yoghurt, chocolates, etc.), cigarette packets, etc. Using the foil provided by the programme helped to reduce the bad smell of heroin, coughing, bad taste and dry mouth: "Here people smoke with tobacco paper, which burns faster and burns your throat" (E7); "Here everyone smokes with yoghurt tops or the foil from chocolates. That stuff leaves a really bad taste in your mouth" (E10).

15 participants also commented that inhaling drugs reduces the risk of blood-borne (HIV and hepatitis) and respiratory infections (influenza, COVID-19, etc.) and overdosing: "If you shoot up, you can get more diseases than from smoking" (E6); "Smoking is safer, you avoid getting an overdose. You don't catch anything with your own gear" (E8).

All the intravenous drug users stated that injecting drugs was more pleasurable and cheaper, but they also said that having the kit encouraged them to inhale the substance and reduce risks: "When I have more gear (drugs), I use foil and I shoot up (inject) less" (E11); "I'm more of a needle user, but if I have foil, then I prefer to smoke. I know I got hepatitis from sharing needles" (E17).

A total of 14 participants considered that inhaling drugs is less stigmatising than injecting them. Users emphasised the fact that aluminium foil is easier to obtain and more discrete than needles: "Shooting up (injecting) has a bad reputation. It's better to smoke. Thanks to this (aluminium foil) you don't use needles" (E9); "Foil is more discrete than needles. The prison guards don't find out, and what's more this foil doesn't give off a burning smell (E17).

Proposals for improvement

All the users gave a positive evaluation of the quality and quantity of aluminium sheets and tubes that were dispensed and how the material was discretely handed out in a blank envelope. However, 14 participants highlighted the need to provide more resources to be able to inhale drugs. They mentioned distributing pipes for smoking crack and bicarbonate to transform cocaine into crack. One very common proposal was the distribution of smoking papers for consuming cannabis and its derivatives: "Smoking crack in bottles is a drag. We need crack pipes and bicarbonate to cook the coke (cocaine)" (E4); "I don't understand why there aren't any smoking papers. They give out foil and needles, which I think is great, but smoking papers are necessary, because they know that people here smoke joints" (E11).

12 of the persons interviewed highlighted the need for this type of programme to be extended to all prisons to provide coverage for inhaled drug use: "It should be offered in other prisons to reach more people" (E5); "There should be more publicity, and we should have access to foil in all the prisons" (E3).

DISCUSSION

This is the first national study to examine the perceptions of drug users who utilise an aluminium foil distribution programme in prison. Our research suggests that distributing aluminium foil encourages inhaled drug use in safer conditions and increases the likelihood of intravenous drug users changing to this route of administration. Some proposals were also offered to improve the coverage of needs of inmates who use drugs.

Thanks to the distribution of foil, drug users receive health education and medical-psychosocial monitoring on drug use in prison[12,18].

Secondary distribution of kits to people not registered in the programme extended the coverage of provision of hygienic material for inhaled drug use and brought people closer to specialised drug-addiction services, as other studies have mentioned[20,26].

Interviewees mention that when they inhale drugs, they detect a decrease in adverse effects caused by using other commercial foils, such as the bad smell produced by this substance, strange taste in the mouth, coughing and dry mouth, as indicated in studies in Germany and the UK[2,21,22]. Specific mention was made of no longer using aluminium taken from food wrapping (chocolates, yoghurt lids, etc.) or cigarette packets.

It was stated that inhaling drugs is a safer practice to avoid blood-borne infections and overdose in comparison to intravenous drug use, as mentioned in previous studies[2,21].

Intravenous drug users were less inclined to accept the distribution of foil, but commented on increased perceptions of how inhaling drugs involved less damage to health than injecting them. Some people stated that having kits increased the likelihood of alternating between routes of administration and taking a break from intravenous drug use, which has been mentioned in other studies[2,20].

Users make use of foil to inhale heroin, and to make home-made pipes for smoking stimulants and cannabis. Previous studies mention that consuming crack or methamphetamine can involve a risk of blood borne (HIV and hepatitis C) or respiratory infections

(tuberculosis, influenza, COVID-19) related to shared use of home-made pipes[6,10,27].

In this regard, users called for the inclusion of resources to be able to inhale stimulants. Previous studies indicate that distributing kits for consuming stimulants is effective in reducing high-risk practices, promoting the transition to inhaling drugs and improving access to health services[10,28,29].

It was also found that home-made methods such as plastic bottles and tubes were used to consume cannabis and its derivatives, which are harmful to health. Mention was made of the need to provide smoking papers. Similar findings are mentioned in a study on prisons in Catalonia[30].

Our findings emphasise the importance of multidisciplinary work to promote harm reduction strategies in prison. We suggest that there is a need to extend the distribution of foil kits in prison, and to study the introduction of strategies for the use of other smokable drugs, such as distributing pipes for smoking stimulants (crack, methamphetamine, etc.) or smoking paper for smoking cannabis and its derivatives. It is necessary to establish strategies such as these to reduce the harm associated with inhaling drugs and promote the transition towards this route of transmission amongst intravenous drug users in prison.

This study is subject to a series of limitations related to the characteristics of the sample. Firstly, the foil distribution programme is only available at the Brians 1 prison, and so we could not gather and compare findings from other prisons.

Another limitation is that the sample is not a large one, but the data was soon saturated and we very much doubt that increasing the number of interviewees would affect the results of our research.

Despite these limitations, the findings of the study may be useful for supporting and developing programmes to dispense hygienic material for inhaled drug use in the prison setting.

CONCLUSIONS

Distributing aluminium foil in prisons is a feasible and effective harm reduction strategy. Drug users receive health education about hygienic and safe drug use and therapy from specialised professionals.

This intervention raises awareness that inhaling drugs is less harmful than intravenous drug use and increases the likelihood of intravenous drug users changing to inhaling drugs. Using foil reduces high risk practices (using aluminium foil from chocolate bars, yoghurts, etc.) and the harmful effects of inhaling substances (cough, bad taste in mouth, etc.).

The kit is used to inhale heroin, and to make home-made pipes to consume stimulants and cannabis. It would be necessary to extend this programme at some future point to other prisons, and diversify the kits to provide greater coverage for inhaling drugs in this particular context.

CONFLICTS OF INTEREST

The authors declare that there are no conflicts of interest.

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