

## Exploring Professionals' Views on the Ethical Considerations of Clinically Provided Safer Injection Education for People Who Inject Drugs

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### Abstract

This study qualitatively examined how addiction physicians perceive safer injection education for people who inject drugs, focusing on three aspects: (1) potential ways to introduce such education within medical settings, (2) how it aligns with each physician's fundamental values and professional aims, and (3) the underlying causes of ethical conflicts surrounding its implementation. Semi-structured interviews were conducted with eleven French physicians working in addiction medicine, across both clinical treatment and harm reduction contexts. Participants consistently supported educational interventions for people who inject drugs, though the type of intervention ranged widely—from offering general guidance to supervising injection practices. Interventions involving hands-on or material aspects of injection were generally viewed as less acceptable. Some physicians argued that in clinical environments, where patients primarily seek to stop drug use, providing safer injection education is inappropriate. In contrast, others maintained that it is a fundamental responsibility of addiction physicians in all settings. The ethical dilemmas linked to delivering such education were described as multifaceted, influenced by societal perceptions of intravenous drug use and expectations regarding physicians' professional conduct. Addiction physicians' perspectives reveal that safer injection education is a deeply charged topic within France's structured addiction management system, reflecting the complex history and challenges of the country's harm reduction policies. **IRB registration:** #00011928

**Keywords:** Safer injection education, IV drug use, Harm reduction

### Introduction

In France, harm reduction (HR) plays a pivotal role in the management of addiction. Drug injection is associated with severe health risks, including viral infections, bacterial contamination, vascular problems, and overdose [1, 2]. Intravenous (IV) drug use is frequently viewed as a marker of intense addiction and is often intertwined with profound socio-economic challenges experienced by people who inject drugs (PWID) [3].

Despite robust evidence demonstrating that HR programs effectively reduce complications related to drug use, these interventions remain the subject of ongoing public and political scrutiny in France, particularly when new initiatives are proposed [4]. The country's early HR efforts, notably needle and syringe programs (NSP), were introduced amid widespread skepticism. Medical professionals and public authorities feared that mitigating the risks of injection could inadvertently promote its prevalence [5, 6]. Alexandre Marchant, in *Impossible Prohibition*, recounts the strong opposition HR faced from health experts, politicians, and society at large [7]. During this period, addiction medicine was largely shaped by psychiatrists with psychoanalytical training, many of whom were hesitant to endorse harm reduction programs [6, 8]. Early opioid maintenance treatments (OMT) were highly restricted, experimental, and politically contentious, reflecting anxieties over what was perceived as overly permissive drug policy. General

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practitioners occasionally offered improvised substitution treatments to assist patients, risking criminal charges. The dual crises of heroin dependence and the HIV epidemic eventually compelled policymakers to formalize HR interventions, with Methadone receiving marketing authorization in March 1995, marking a key step in institutionalizing HR in France [7]. Although initial implementation was cautious—with NSP serving as the primary intervention for PWID—HR is now enshrined in the Public Health Code and is central to contemporary addiction management [9]. However, a clear institutional divide persists between conventional healthcare settings, such as hospitals, private practices, or Centres of Care and Prevention in Addiction Medicine, and HR-specific facilities like Support Centres for Harm Reduction and drug consumption facilities (DCFs).

The introduction of DCFs has revived longstanding public debates [10, 11]. While these facilities demonstrably reduce public drug use and associated crime [12], public discourse often focuses on perceived neighborhood impacts. Similarly, new educational programs addressing safer injection practices may provoke controversy and misunderstanding, even among healthcare providers supporting HR initiatives [10, 11]. Societal attitudes and professional norms may lead to perceptions that physicians' involvement in HR education is incompatible with their traditional roles.

To examine these tensions, we engaged French addiction physicians to share their experiences and perceptions of safer injection education as part of injection HR. We specifically investigated how acceptable they find such interventions and how these practices align with their professional responsibilities, aiming to identify arguments for and against physicians' active participation in promoting safer intravenous drug use.

## Methods

This qualitative study was carried out by AD at the ETREs Laboratory ("Ethics, Research, Translations," University of Paris-Cité) under the supervision of CD, a public health physician and researcher in social and cultural anthropology. AD, an addiction physician holding a Master's degree in Ethics and Bioethics, conducted preliminary bibliographic research to frame the investigation from sociological, anthropological, historical, and political perspectives.

We conducted eleven semi-structured interviews with French addiction physicians. Participants were recruited

through professional networks and via snowball sampling. To capture a comprehensive range of professional perspectives, we intentionally included physicians working in diverse environments, including hospitals, private practices, and HR structures. No restrictive criteria were applied to the sample to ensure inclusion of varied expertise. Videoconference interviews were also offered to address scheduling and geographic limitations. Appointments were arranged by AD via telephone or email. One invited participant declined due to scheduling conflicts. Interviews were conducted at participants' workplaces.

The interview guide comprised open-ended questions addressing injection HR and was flexible to accommodate context-specific discussion. We deliberately avoided theoretical or leading questions to prevent influencing responses. The guide was pilot-tested in March 2022, and the final version is provided in the Appendix.

For data analysis, we employed the Framework Analysis method [13]. Following transcription and careful review of the data, all interviews were manually coded, with a focus on capturing each participant's unique experiences rather than providing purely descriptive labels. Once coding was complete, codes were organized into categories and examined across contexts to identify variability and synthesize the data into a coherent narrative. No software was used for data management.

In preparing this manuscript, we followed the Guidance for Reporting Qualitative Research [14].

## *Consent, information and ethics*

Participants received an information note outlining the research broadly to minimize preparation and avoid influencing their responses. At the start of each interview, the physician was reminded of the recording and provided informed consent. Interviews concluded with participants sharing general impressions. AD recorded the interviews and also took handwritten notes to capture non-verbal cues. All interviews were fully transcribed by AD, preserving exact words, intonation, and emotional expression to include both verbal and non-verbal data in the analysis.

Video interviews were conducted on an encrypted platform, and recordings were deleted after transcription. No identifying information was included in the transcripts, and no document linked interview numbers to participants. Due to the sensitive nature of the subject,

transcripts are not publicly available. Data were stored securely within the ETREs laboratory, with plans for deletion after five years. Data processing was declared to the University Paris-Cité Data Protection Officer, and ethical approval was obtained from the Assistance Publique – Hôpitaux de Paris Ethics Committee (IRB registration: #00011928).

## Results

### *Sample characteristics*

Eleven interviews were conducted, each lasting between 30 and 50 minutes, with an average duration of 38

minutes. Three interviews were face-to-face, seven via videoconference, and one by telephone at the participant's request, all within France.

The sample included five female and six male physicians. Ages were not reported to preserve confidentiality. Five participants had psychiatric training, four were general practitioners, and two had other medical specialties. Additionally, two nurses contributed at the request of one physician; their experiences were transcribed and included in the analysis. Two participants primarily worked in specialized HR settings, while the remaining participants mainly operated within healthcare structures.

**Table 1** presents further details on the general characteristics of the interviewees.

**Table 1.** Participant Profiles, Areas of Expertise, Connection to Injection Harm Reduction, and Acceptable Injection Harm Reduction Practices

Interview	Training Background	Work Setting	Area of Expertise	Connection to Research Question
I1	General Practitioner	Hospital	General addiction medicine, including PWID	No direct involvement in injection HR. Refers patients to HR services. Potential methods: offering general guidance. Main view: lacks sufficient expertise, hospital structure not suited for injection HR, patient focus is on abstinence rather than HR.
I2	Psychiatry	Hospital	Complex cases, specialized consultations	Strong connection to injection HR (career and research). Injection HR not feasible in healthcare settings, delegated to HR services. View: questions the extent of HR implementation.
I3	Other Specialty	HR Structure	General addiction medicine, including PWID	Works in HR setting, views injection HR as critical. Potential methods: discussions, explanations, vein access guidance, paraphernalia education. No real-time injection oversight due to time constraints in medical schedules.
I4	Psychiatry	Hospital	General addiction medicine, including PWID	Prior HR experience in prison settings. Injection HR viable only if tied to therapeutic goals for other substances; no exclusive medical follow-up for injection HR. Potential methods: general and practical paraphernalia advice.
I5	General Practitioner	HR Structure	General addiction medicine, including PWID	Strong connection to injection HR (career and research), considers it vital. Potential methods: general and practical paraphernalia advice, group arm model demonstrations, substance preparation guidance.
I6	Other Specialty	Hospital	General addiction medicine, including PWID, specialized consultations	Connected to HR through associative work and expert consultations, views injection HR as essential. Potential methods: general and practical paraphernalia advice. View: opposing HR is hypocritical; addiction specialists must embrace HR.
I7	General Practitioner	Private Practice	General addiction medicine, including PWID	Actively practices injection HR. Potential methods: real-time injection supervision. View: driven by personal experience with a user, emphasizes utility and relationship-building.
I8	General Practitioner	Hospital	General addiction medicine, including PWID	Strong connection to injection HR (career). Potential methods: general advice, safe injection and screening tutorials. View: emphasizes respect for patients, utility, and relationship-building.

<b>I9</b>	Psychiatry	Hospital	Complex and specialized consultations	Direct connection to injection HR (research). Refers patients to HR services. View: organizational constraints limit doctors to strictly medical tasks.
<b>I10</b>	Psychiatry	Hospital	Complex and specialized consultations	No direct involvement in injection HR, delegated to HR services. Potential methods: general advice, safe injection tutorials. View: others perform HR effectively with fewer resources, no moral conflict with HR.
<b>I11</b>	Psychiatry	Hospital	Complex and specialized consultations	No direct involvement in injection HR. Potential methods: general advice, safe injection tutorials.

Key Terms: PWID – People Who Inject Drugs, HR – Harm Reduction

### Dual perception of HR

To capture participants' views on safer injection education for PWID, we first examined their broader understanding of HR. Some participants interpreted HR as encompassing any measures aimed at mitigating the physical and psychosocial harms associated with drug use, integrating these measures directly into medical care. A less common perspective contrasted HR with medical care, framing HR more pragmatically as primarily the distribution of sterile materials, largely detached from medical practice. These differing conceptualizations appeared to align with professional backgrounds. The more comprehensive view of HR was predominant in our sample, with nine participants—mostly general practitioners—adopting it.

This distinction may reflect the institutional separation in France between HR facilities and conventional healthcare structures, a topic often debated among addiction medicine professionals. Some participants expressed concern over this separation:

*“... and what I regret in our approach to these questions, uh... it's this kind of fragmentation... it's this kind of separation between care uh... real medical care – the one which is really care because in France care is always medical... and what we would call ... social support or help for survival...” (I5).*

Other practitioners, however, viewed the separation as meaningful, especially in relation to patients seeking abstinence:

*“Everyone understands that HR must be every- where – it's true... But some patients ask for help... to maintain abstinence... and ... despite everything, we should also have places uh... that are different... uh... places oriented towards abstinence in which HR cannot enter...” (I9).*

### Perceptions of safer injection education

All physicians in our study expressed support for safer injection educational interventions. Nevertheless, their stance on the physician's role in delivering this education appeared somewhat ambivalent.

Participants described diverse approaches to safer injection education. Some offered general guidance during consultations, such as advice on using sterile materials. Others provided more hands-on guidance:

*“I mean, we have to stop the hypocrisy – we give them sterile equipment! So (laughs) we're not going to say hum... I don't want to know how you inject and I'm not going to teach you how to inject well, but please take clean syringes...” (I6).*

Educational workshops were another common method. One participant used video sequences demonstrating safe injection, while another employed a plastic arm to illustrate needle handling:

*“... you know, plastic arms – that can be a pretty good workshop to see how they plant the needle, uh... how they manage... the inclination of the needle...” (I5).*

These workshops were largely targeted at PWID seeking HR services in specialized facilities. In healthcare settings, however, such interventions were often seen as inappropriate:

*“But the HR of injection ... we can do it for very pre- carious patients that we see individually, that of course, but... We don't institutionalize that in terms of... patient counselling and support groups.” (I2).*

Regarding real-time injection practice, opinions varied. Some professionals assisted PWID with venous access or supervised the injection of saline or drugs. Yet, most participants considered this practice unacceptable in healthcare contexts:

*“We're not going to help with injection... We can say to ourselves... yes but...if we engage in that, it can go very far... So, I think that... we, doctors uh... and nurses of the sanitary uh... we must be in the care process...” (I2).*

*Should physicians educate patients and users on safe injection? practical and ethical arguments*

Participants approached this question from multiple angles. Some considered that physicians might be less skilled than nurses in providing safer injection education, given that nurses often have more specialized training in injection techniques. Others highlighted the practical challenge of incorporating this time-intensive educational support into already demanding medical schedules.

Conversely, many participants justified safer injection education based on their awareness of the risks associated with improper injection practices. Injection was described as a complex procedure, requiring proper training even for healthcare professionals. Several interviewees observed that PWID often had limited anatomical knowledge, which could result in unsafe injection methods.

From an ethical standpoint, some participants emphasized the physician's responsibility to prevent painful or mutilating injection complications. In these cases, safer injection education was framed as a duty—a core responsibility or “job”—rather than a discretionary choice.

Several practitioners highlighted the importance of “bringing the person into care” as a critical element of injection HR and safer injection education. In this context, safer injection education was viewed as a temporary measure, serving as an initial step toward a “real” therapeutic objective, namely abstinence. Other participants challenged this perspective, advocating for acceptance of ongoing drug use as a personal choice and promoting a non-judgmental recognition of the individual's capacity to make decisions aligned with their own values. These participants considered HR a pragmatic response to the realities of drug use, emphasizing the need to detach interventions from moral judgments of good or evil:

*“I’m not going to judge... I can’t judge people’s choices and behaviours - that’s related to the prohibitionist system and all that - it’s a practice that’s about the individuals themselves...” (15).*

Some participants framed safer injection educational support by medical professionals as an expression of humanism, compassion, and respect:

*“It’s (long pause, thinks) it’s the story of respect...- it’s the story of...that the person knows that...uh...the caregiver is not there to criticize them, it’s just...it strengthens the bond...” (17).*

A fundamental tension emerged between those who believed physicians have a role in providing safer

injection education and those who preferred that such interventions remain the domain of non-medical staff. Deontological arguments were invoked in both perspectives: physicians supporting education viewed it as a clear professional duty with significant practical importance in preventing injection-related harm. In contrast, physicians prioritizing the “cure” of PWID and the attainment of the “ideal of abstinence” tended to delegate safer injection education to non-medical personnel.

### *Social representations concerning injection and medical professionals*

Overall, participants generally considered safer injection education acceptable. However, acceptability decreased as the education became more directly connected to actual injection practices, particularly within healthcare settings. For some participants, moral tensions appeared to stem from prevailing social representations of drug injection in society—perceptions that were, to some extent, internalized by healthcare professionals themselves. In France, cautious attitudes from both policymakers and professionals contributed to a significant delay in the implementation of HR programs compared to other European countries. Social scientists have often interpreted this delay as reflecting the perception of injectable drug use as a “moral vice” [2, 15].

Several participants emphasized the inherent nature of injection, describing it with terms such as “shocking,” “dirty,” “violent,” “morbid,” and “deadly,” highlighting concerns about contamination from the breach of skin barriers:

*“Rese topics are so controversial (gesticulates)... so disturbing... It’s so debated... like... like... harm reduction... drug consumption rooms... so... well... It’s so dirty (gesticulates)... It’s something very serious...” (12).*

*“I tend to think that injection is a relatively morbid act. And uh... and yeah... the guy, he’s practically taking a blood test! He’s injecting himself with some- thing... he’s putting the needle, he prepares the thing, he injects a drug into his body! If we put that on paper, it’s... it’s super violent in fact... It’s extremely violent...” (16).*

Interviewees occasionally alluded to the sensory aspects of injection, referencing hetero-injections and needle penetration. In discussing the psychoactive effects, vocabulary such as “extreme high,” “ecstasy,” and



“orgasmic sensation” was used, going beyond clinical description and reflecting an almost imagined or fantasized perception. Several participants highlighted the demonized dimension of injection, portraying it as secretive and socially stigmatized, with IV drug use framed as scandalous or “taboo”:

*“At the beginning of the last century, uh where clearly injections of opiates were the archetype of immoral and decadent use... uh... At the time there were essentially subcutaneous injections uh... in the thighs... And it was a part of the body that couldn't be shown at all... uh... so there is something like that, a bit scandalous...” (I4).*

Some participants noted a tension between injection education and the historical mission of addiction specialists in France, who were often psychoanalytically oriented and focused on abstinence. Similarly, societal expectations regarding physicians' roles—potentially internalized by caregivers—rendered injection education potentially dissonant. French society imposes expectations of moral and behavioral exemplarity on physicians, as codified in the French Medical Deontology Code. In its opening chapters, alongside duties of respect for human life and dignity, it is stated that “the doctor must, in all circumstances, respect the principles of morality, probity and devotion essential to the exercise of medicine” [16]. In commentary included in the French Public Health Code, morality is defined in relation to societal norms and the laws of a democratic society. Notably, in 2016, the National Council of the Order of Doctors, which oversees French physicians' compliance with ethics and deontology, opposed the opening of the first French DCF [2].

Overall, professional and social representations of drug injection appear to shape the controversies surrounding safer injection education. In light of these perceptions, the idea of a physician teaching safe injection practices to PWID could provoke emotionally charged debates concerning drug use, HR, and professional integrity.

## Discussion

The empirical component of this study was guided by the question of how compatible safer injection education is with the professional responsibilities of physicians. This qualitative study does not aim to generalize findings or quantify the prevalence of specific representations and attitudes. Its objective is to describe various forms of safer injection educational practices, clarify certain

professional positions, and identify potential sources of ethical tension.

None of the interviewees expressed a fundamental refusal of this practice. Some exhibited nuanced reluctance concerning acceptable ways to deliver injection education, particularly regarding the types of settings in which it occurs. Attitudes toward injection appeared partly shaped by professional perceptions, which are marked by both disgust and fascination toward the act itself. Injection is seen as profoundly deviant and forbidden, yet simultaneously associated with extreme effects described in highly sensual terms. This ambivalent perception, combining the scandalous with the intriguing, recalls the early history of recreational morphine injection. From the mid-19th century, opiates were administered subcutaneously for recreational purposes, a practice emerging alongside the need for battlefield pain management and the discovery of morphine in 1804, which led to the creation of the first modern syringe [17–19]. “Soldier's disease” quickly spread into broader society, with morphine injection acquiring an ambiguous connotation of pleasure and decadence, particularly scandalous and sensual when women injected in their thighs, at a time when exposing an ankle was considered shocking [17]. Many participants critically reflected on how this historical imaginary has influenced medical practice and preferred to distance themselves from it.

Participants proposed various forms of safer injection education, outlining a spectrum of approaches. There appears to be a distinction between what could be considered therapeutic education (general guidance) and other interventions more directly connected to the realities of injection. The latter are not generally considered therapeutic and are often delegated to other professionals or peers. This distinction could reflect the notion that medical involvement in drug injection—a clearly harmful behavior from a medical standpoint—is inherently problematic. Most participants challenged this idea, recognizing that injection HR carries therapeutic potential, allows for building a therapeutic relationship, and offers obvious preventive benefits.

The dual understanding of HR was prominent in participants' discourse. This duality may relate to historical and cultural aspects specific to HR in France and is evident in how HR has been institutionalized outside conventional healthcare settings. In the French model, HR remains largely separate from healthcare,

creating a barrier between users and abstinent individuals.

This institutional separation may contribute to the exclusion of PWID from health facilities, limiting their access to patient-centered care [20]. To receive care, even for issues unrelated to addiction, users are often required to agree to abstinence, frequently verified through biochemical tests. In this context, persistent IV users may be perceived as Michel Foucault's "abnormal," subjects to pathologization aimed at controlling what is socially defined as dangerous, disorderly, or deviant [21]. However, it is important to note that deviance and abnormality are socially constructed rather than naturally determined, often serving purposes of control and dominance [22].

PWID remain separated from individuals who have achieved abstinence. Such institutional fragmentation may be counterintuitive, given the complex trajectories of users' "careers." According to Howard Becker's concept in *Outsiders*, a user's career evolves sequentially [22]. PWID are not necessarily destined to remain IV users indefinitely; evolution from one stage to another is possible. Institutional separation, however, risks trapping PWID in IV use, potentially increasing social isolation and vulnerability.

Managing chronic disease entails providing support to mitigate disease consequences and "control the disorders it causes," a responsibility closely aligned with HR [23]. Public health indicators underscore its practical value [24]. Despite these justifications, injection HR can remain disconcerting. Safer injection education may be perceived as HR taken to its extreme, and medical participation could be seen as symbolically or practically endorsing a "deviant" practice disconnected from medical care and perpetuating IV drug use. Nonetheless, qualitative studies on French public opinion regarding injection HR in DCF suggest increased acceptability when health professionals manage these structures and actively encourage PWID to cease use [2].

The division between healthcare and HR appears to be strongly enforced, with safer injection education largely confined to HR settings. Because medical professionals are rarely present in these facilities, physicians are generally absent from injection HR initiatives. This absence symbolically deprives people who continue to use drugs of medical guidance and expertise. Such a scenario reflects the widespread belief that improving health necessitates complete cessation of drug use. Approaching drug use solely as a medical issue or as a

source of disease neglects its broader cultural and social dimensions and reinforces a form of "medicocentrism," overlooking essential non-medical factors such as housing, financial stability, and survival. At the same time, some PWID may view addiction physicians as agents of social control, which could render them less "legitimate" in the context of injection education.

This study has several limitations. First, the sample size was limited. However, given the exploratory scope of this qualitative research, this does not appear to undermine the findings. Additionally, the study focused exclusively on the perceptions of medical professionals working in addiction medicine. To gain a fuller understanding, it is necessary to investigate the perspectives of PWID themselves. Future qualitative studies should explore how PWID perceive the involvement of medical professionals in safer injection education.

Due to scheduling constraints, video interviews were conducted. While this format may have limited the ability to fully capture non-verbal cues, participants were familiar with encrypted video conferencing platforms, especially during the COVID-19 pandemic, and some expressed a preference for this method. Considering that the study sought insights from professionals with diverse backgrounds across multiple French structures, video interviews offered a practical solution to overcome geographic limitations.

Another limitation concerns the first author's direct connection to addiction medicine. To reduce potential bias, she deliberately distanced herself from her professional perspective on injection HR and approached interviews from a neutral, non-judgmental standpoint. The research supervisor and other members of the ETRES lab provided critical oversight, discussing the study from anthropological, sociological, philosophical, and medico-economic viewpoints during regular meetings to broaden the interpretive lens.

Reimagining HR practices requires reconsidering the prevailing approach to drug use. The failure of the "war on drugs" is well documented, having produced enormous costs with little impact while generating incarceration, racial disparities, and police violence [25]. Many scholars argue that HR is more appropriately understood as a political or cultural matter rather than purely a medical one. In this study, some interviewees noted that countries with well-established HR programs tend to share cultural traits that favor pragmatic, rather than moralistic, approaches. French studies, though limited by convenience sampling, suggest that

acceptance of DCFs correlates with political orientation, with conservative respondents demonstrating lower acceptance [2]. A similar conservative opposition to HR was observed in Canada in 2007 [26]. Internationally, historical and cultural contexts shape HR implementation. Des Jarlais *et al.* attribute challenges in the United States to strong Puritan influences in civil law and the historical stigmatization of drug use among racial minorities [27]. In Russia, HR is not government-supported, OMT is prohibited, drug users are incarcerated, and HIV prevalence exceeds 1% [28, 29]. Contemporary France values diversity, vulnerability, and interdependence, recognizing the shortcomings of a repressive system [30]. Identifying ongoing sources of exclusion is critical to reform practices and develop drug regulation policies that emphasize cultural sensitivity and ensure equitable access to patient-centered care for PWID.

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## References

1. Cornford C, Close H. The physical health of people who inject drugs: complexities, challenges, and continuity. *Br J Gen Pract* juin. 2016;66(647):286–7.
2. Munoz Sastre MT, Kpanake L, Mullet E. French people's positions on supervised injection facilities for drug users. *Subst Abuse Treat Prev Policy* déc. 2020;15(1):79.
3. Tun S, Vicknasingam B, Singh D. Factors affecting addiction severity index (ASI) among clients enrolled in methadone maintenance treatment (MMT) program in Myanmar. *Harm Reduct J* 5 août. 2021;18(1):84.
4. Inserm. Réduction des risques chez les usagers de drogues. Available from: <https://www.ipubli.inserm.fr/handle/10608/86>.
5. Cordonnier JP, Touzeau D, Charles-Nicolas A. La seringue et le sida. *Ann Med- Psycho*. 1988.
6. Arnold Richez F. History, stories... risk reduction and a mean of survival. *Le Courrier de addictions*. 2004;2:63–70.
7. Marchant A. L'impossible prohibition. Perrin; 2018.
8. Stimson GV. Aids and injecting drug use in the United Kingdom, 1987–1993: the policy response and the prevention of the epidemic. *Soc Sci Med* sept. 1995;41(5):699–716.
9. Jayle D, Pialoux G. Guerres à la drogue en Europe. *SWAPS* 88–89. 2018.
10. Roux P, Le Gall JM, Debrus M, Protopopescu C, Ndiaye K, Demoulin B, et al. Innovative community-based educational face-to-face intervention to reduce HIV, hepatitis C virus and other blood-borne infectious risks in difficult-to-reach people who inject drugs: results from the ANRS–AERLI intervention study. *Addiction*. 2016;111(1):94–106.
11. Loi n°. 2016-41 du 26 janvier 2016 de modernisation de notre système de santé - Dossiers législatifs - Légifrance.
12. Inserm. Salles de consommation à moindre risque: rapport scientifique – Mai 2021 · Inserm, La science pour la santé. Available from: <https://www.inserm.fr/rapport/salles-de-consommation-a-moindre-risque-rapport-scientifique-mai-2021/>.
13. Parkinson S, Eatough V, Holmes J, Stapley E, Midgley N. Framework analysis: a worked example of a study exploring young people's experiences of depression. *Qual Res Psychol* 2 avr. 2016;13(2):109–29.
14. Neale J, West R. Guidance for reporting qualitative manuscripts: Editorial note. *Addict* avr. 2015;110(4):549–50.
15. Jauffret-Roustide M, Cailbault I. Drug consumption rooms: comparing times, spaces and actors in issues of social acceptability in french public debate. *Int J Drug Policy* juin. 2018;56:208–17.
16. Article R. 4127-3 - Code de la santé publique. Code de la santé publique. Sect. Code de déontologie médicale août 8, 2004. Légifrance.
17. Kempfer J, Marchant A. Du clystère à la seringue: l'injection à travers l'histoire. *SWAPS* 75e éd. 2014.
18. Lépine P, Voinot J. Une brève histoire de la seringue. *Histoire des sciences médicales*. 2010; 49–53.
19. Robert C. A history of syringes and needles, University of Queensland. 2018. Available from:



- <https://medicine.uq.edu.au/blog/2018/12/history-syringes-and-needles>.
20. McNeil R, Kerr T, Pauly B, Wood E, Small W. Advancing patient-centered care for structurally vulnerable drug-using populations: a qualitative study of the perspectives of people who use drugs regarding the potential integration of harm reduction interventions into hospitals. *Addict* avr. 2016;111(4):685–94.
  21. Foucault M, Paris. Gallimard; 1999. 351.
  22. Becker HS. *Outsiders: studies in the sociology of deviance*. New ed. New York, NY: Free; 1997. p. 215.
  23. Baszanger I. Les maladies chroniques et leur ordre négocié. *Rev Fr Sociol*. 1986;27(1):3–27.
  24. Coppel A. Drogues et médicalisation: entre expertise et demande sociale. *Multitudes*. 2011;44(1):78.
  25. Coppel A. Une rupture du consensus sur la guerre à la drogue ? *Rhizome* 2016;N 62(4):7.
  26. Hyshka E, Anderson-Baron J, Karekezi K, Belle-Isle L, Elliott R, Pauly B, et al. Harm reduction in name, but not substance: A comparative analysis of current canadian provincial and territorial policy frameworks. *Harm Reduct J* déc. 2017;14(1):50.
  27. Des Jarlais DC. Harm reduction in the USA: the research perspective and an archive to David Purchase. *Harm Reduct J* déc. 2017;14(1):51.
  28. Davitadze A, Meylakhs P, Lakhov A, King EJ. Harm reduction via online platforms for people who use drugs in Russia: a qualitative analysis of web outreach work. *Harm Reduct J* déc. 2020;17(1):98.
  29. Nikoloski Z, King EJ, Mossialos E. HIV in the Russian Federation: mortality, prevalence, risk factors, and current understanding of sexual transmission. *AIDS* 15 mars. 2023;37(4):637–45.
  30. Brugère F. Qu'est-ce que prendre soin aujourd'hui ? *Cah Philos* 21 janv. 2014;136(1):58–68.