

The initial prescription of methadone in health establishments

An analysis of medical practices in hospital and penal environments since the introduction of the circular dated January 30, 2002

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The authorisation to prescribe methadone introduced in 1993 for the treatment of opiate addicts¹ has seen France adopting medical practices already in force in most European countries (including the United Kingdom, Switzerland, the Netherlands, etc). When high dose buprenorphine (HDB) became available on the market in February 1996 (marketed under the name Subutex®), available through non-hospital treatments and consequently more accessible than methadone, the number of recipients for Opioid Substitution Treatments (OST) using HDB underwent rapid growth, bringing about an imbalance in comparison to the availability of methadone: in 2001 the number of people with a problematic consumption of opioids (or of cocaine) [1] was estimated at between 150,000 and 180,000, 100,000 of which were receiving substitution treatments, usually based on HDB (88%) [2]. This predominance of HDB places France in a highly original situation when compared to the other European countries, where the average share of methadone among the OST was around 90% (vs 12% in France) [3].

Faced with an increasing number of cases of Subutex® diversion, the misuse of this drug by means of injection and its trading on the street, the public authorities were keen to widen the scope for the prescription and delivery of methadone in order to boost its share of OSTs and to reach a segment of the opioid dependent population who do not visit specialised care centres. Following the circular of January 30, 2002², any doctor practising in a health establishment is authorised to suggest a methadone-based substitution treatment to adult, opioid-dependent addicts. Up until then, this possibility had been reserved for doctors working in specialised drug addiction treatment centres (CSSTs), working for associations or hospitals, and operating in open or penal environments³.

As part of an overall approach aimed at better balancing out the number of patients

treated with methadone (approximately 12,000 patients) compared to those treated with HDB (approximately 80,000), the growth in the Initial Prescription of Methadone (FPM) in both hospitals and penal facilities has been included among the government's plans to combat illegal drugs, tobacco and alcohol (2004-2008).

The French Monitoring Centre on Drugs and Drug Addiction (OFDT – Observatoire Français des Drogues et des Toxicomanies) was appointed in November 2006 by the Department of Hospital Care and Treatment Organisation (DHOS), the Directorate General for Health (DGS) and the Interdepartmental Mission against Drugs and Drug Addiction (MILDT – Mission Interministérielle de Lutte contre la Drogue et la Toxicomanie) to carry out an assessment of the impact of the 2002 circular. Its purpose was to examine the noticeable changes six years later, exploring the twin aspects of the accessibility of methadone and the medical practices used in the medical treatment services now authorised to issue initial prescriptions, including hospital departments and (in penal environments) mobile consultation and treatment units (UCSAs – Unités de Consultation et de Soins Ambulatoires)⁴ and the Regional Medico-Psychological Services (SMPR – Services Médico-Psychiatriques Régionaux).

The first aspect of the survey focused on measuring the application of the circular in the 107 hospital departments identified as

1. Circular DGS/SP3 no.72 dated November 9, 1993 concerning guidelines in the health field regarding the fight against drugs, followed by DGS circular number 14 dated March 7, 1994 concerning the framework for the use of methadone when treating drug addicts.

2. Circular no. 2002/57 dated January 30, 2002 concerning the prescription of methadone by doctors practising in health facilities, when initiating substitution treatment for addicts with a major dependency on opioids.

3. 16 penal facilities still have their own CSST on-site (the former "drug addiction satellites"): the remand centres of Bois d'Arcy, Bordeaux-Gradignan, Dijon, Fleury-Mérogis, Grenoble-Varses, Loos, Lyon-Perrache, Nice, Paris/La Santé, Poitiers, Rouen, Strasbourg and Toulouse, and the penitentiary centres of Fresnes, Marseille/Les Baumettes and Nantes.

4. Created in 1994 by the inmate management law which transferred responsibility of treatment for convicts to the hospitals, the UCSA are local hospital branches located in each prison.

methadone prescribers (out of around a thousand hospital departments in France)⁵. The second identified the 152 treatment units operating in penal environments which were not previously authorised to prescribe methadone (in mainland France and the overseas départements) and consequently excluding the 16 centres with CSSTs issuing initial prescriptions from prior to 2002, representing a quarter of the reception capacity in penal environments⁶.

The initial prescription of methadone in hospital departments

The survey carried out within the departments prescribing methadone provides an overview of the distribution practices for methadone and the factors determining its prescription in a hospital environment while at the same time describing the profile of the patients treated.

The initial prescription of methadone: activity figures

Out of the 6,700 patients treated in 2006 by means of a substitution treatment, 45% (i.e. 3,005 people) received methadone (an average of 36 patients per establishment). The percentage of methadone treatments among total OST treatments stood at between 6 and 100% for the 85 departments supplying data.

Almost 40% of patients treated by means of a methadone-based OST are receiving treatment as part of a FPM solution, usually provided via an external consultation (63%) rather than hospitalisation (37%).

The initial minimum prescribed dosage levels are generally between 10 and 30 mg according to the departments concerned (with an average of 26 mg per day). Some doctors initially prescribe minimum doses below those recommended by the 2002⁷ circular, with two declaring initial dosage level of 15 mg and five beginning treatment at 10 mg and two at 5 mg.

For their part, the maximum initially prescribed dosage levels vary among the departments from between 10 and 160 mg (an average of 49 mg per day) and remain below 40 mg per day in 65% of cases.

The clinician doctors involved in the prescription of methadone are most often psychiatrists (32%), addictologists (25%) or general practitioners (17%). We find an average of two prescribers per department (along the 83 departments submitting data), although this may be as high as six doctors: this figure is not «proportional» to the size of the hospital but instead tends to reflect prescription habits.

Half of the prescribing doctors (n=41) practice in medical departments, and most often in psychiatry (n=20), polyvalent medicine (n=9) or internal medicine (n=8). Two are assigned to a hepatogastroenterology department and two others to an infectiology department.

More than two out of five of the doctors questioned (n=36) also stated that they are involved in activities concerning the

Addictology Treatment and Liaison Teams (ELSA – Equipes de Liaison et de Soins en Addictologie)⁸.

Initial prescription in hospital departments rather than in a CSST

A lack of access to the CSSTs in the region, their total absence or distance are the key reasons put forward to justify the provision of treatment via a hospital department (42% of cases). Possible somatic complications or the psychiatric co-morbidity of patients requiring treatment in hospital are also mentioned (by 12% and 4% respectively) as reasons for which users are reluctant to receive treatment in a CSST (12%) or the fact that the hospital in question is considered as the «referring» service in the département (county) (11%).

The high level of requirements expressed by the CSSTs is also one of the reasons behind the preference for treatment in a hospital environment (9%) as are the «nomadic» habits of certain patients (9%) making treatment in a CSST a complex matter.

Recipients

Although a third of patients are referred to the hospital by a GP, around a quarter (28%) are referred by «word-of-mouth». They may also be referred by another hospital (20%) as part of psychiatric treatment, somatic treatment (infectious or otherwise) or obstetric monitoring. Finally, 12% are referred by a CSST, 3% by a penitentiary establishment and a similar number by other health professionals (liaison teams) or specialised organisations (the Drogues Info Service).

The 1,174 patients concerned by FPM have similar consumption «careers». Almost half (530) are users of HDB (including injectors) and slightly under a quarter (249) are untreated heroin addicts. A significant number (238) declare an awareness of street methadone consumption. Fifty three patients have already received morphine sulphate although we do not know whether FPM is carried out simultaneously - something which is not advised - or subsequently. The hypothesis according to which methadone-based treatment is proposed in order to include patients under morphine sulphate in a maintenance programme appears to be the most likely.

As for the various pathologies encountered, a third of patients display psychiatric co-morbidities (no further information), while 5 patients were reported as being hepatitis C positive and two HIV positive. Finally, 67 pregnant women also benefited from FPM (5% of the total).

The widely differing profiles⁹ demonstrates the diversity of the situations in which substitution treatments may be undertaken, in conformity with the guidelines recommended in the circular.

Release support networks

Support at the time of release is generally provided by a GP (43%), a CSST (22%), a

health network (14%) or a medical psychology centre (9%). Other support services, such as another hospital department (in six cases), a UCSA, a CCAA or a pharmacy (one occurrence in each case) were also mentioned. The total absence of a support service was mentioned in four cases.

The circular recommended suggesting the possibility of a support service and its feasibility the moment the prospect of treatment is raised. The use of a CSST-based support service is recommended for those subjects requiring daily monitoring and dispensary services. Two other support services could also be envisaged [4]: non-hospital care, with referral being influenced by the stabilisation of the methadone dosage, the absence of opiates in urine analyses and the capacity of the patient to manage his own treatment independently; or the local pharmacy (treatment dispensed locally using an initial prescription from a hospital doctor, mentioned in a single case here).

Prescribing doctors were also advised to make use of other useful professionals (pharmacists, psychiatrists, social workers, CSSTs, etc) in order to integrate professional networks and more generally encouraging other networks [5].

The circular has therefore had very concrete effects in the departments surveyed, as in reality the hospital environment provides a solution to the lack of access to specialised treatment centres. The survey also highlights the predominant role played by GPs, who are the leading source of referrals of users to the hospitals.

The initial prescription of methadone in penal environments

In penal environments, the most striking points noted concern the factors related to the extension (or stoppage) of the initial prescription of methadone, the professional practices of the treatment staff and the profile of the opium addicts receiving methadone-based treatments.

5. These hospital departments were identified thanks to a list supplied by the Bouchara-Recordati laboratory.

6. In 2006, the national prisons system had a total of 49,487 operational places (in mainland France and the overseas départements) apart from the semi-open prisons and open prisons. The 16 prisons possessing their own CSSTs are among some of the largest penitentiaries. They include 12,331 detention places, i.e. 24.9% of the total national capacity.

7. According to the circular, the lowest minimal initial dosages should be between 20 and 30mg according to the subject's level of dependency.

8. Organisation set up by the circular DHOS/O2-DGS/SD6B 2000/460 dated September 8, 2000 concerning the organisation of hospital treatment for persons with addictive behaviour. Official Journal of the Health Ministry Number 2004/38 p. 167-19

9. Several replies were possible for this question and the level of double answers ticked was relatively high.

Remarkable progress

More than a third of opium addicts treated by the UCSAs or the SMPRs interviewed as part of an OST received a methadone-based treatment (35%). The percentage accounted for by methadone has therefore sharply risen: this was estimated at 22% in 2004 (vs 78% for HDB) for the same sample¹⁰. Despite major disparities, almost a third of establishments (32%) stated that more than half of patients on OST received methadone-based treatments (26 establishments out of 82).

During the second half of 2006, 943 opium addicts imprisoned in 84 of the 152 establishments in the sample received a methadone-based substitution treatment (an average of 11 patients per prison). A weighted estimation shows that patients treated with methadone account for approximately 40% of the imprisoned opium addict penal population.

The percentage accounted for by initial prescription as part of total methadone prescriptions is around 28% compared to 72% for continued treatments during imprisonment. Two thirds of the treatment units newly authorised to initiate methadone-based OST in a penal environment have FPM rates below 25% (52 establishments out of the 78 replying). Four prisons (in all cases remand centres holding fewer than 300 prisoners) continue the same number of methadone-based treatments as they initiate and four others, characterised by their large size (more than 100 inmates) declared FPM levels higher than the maintenance rates. In an increasing number of cases, the start of treatment for opioid dependency with the aid of methadone is initiated in prison.

The option made available by the 2002 circular appears to have been taken up in most establishments: 60% of the establishments surveyed declared at least one FPM during the second half of 2006 (73% after adjustment, i.e. the removal of those establishments declaring no opium addicted prisoners). However, we should mention that the 36% of establishments which did not reply to the survey probably include those very establishments experiencing difficulties with substitution in general or with FPM in particular. Nevertheless, by comparing this data with that from the Ministry of Health (2004) we see that 36 establishments which declared no initial prescription in 2004 declared at least one in 2006, which tends to support the hypothesis of a growth in the initial prescription of methadone in penal environments.

Those establishments actually practising FPM are characterised by their size, which tends to be larger than average (302 prisoners)¹¹. These are generally establishments in which a single department issues prescriptions (except in cases in which several departments actively prescribe) suggesting the existence of a counterproductive effect due to the dispersal of authority (concerning the accessibility of methadone). Most often this concerns remand centres and less frequently closed prisons. Finally, they all also offer continued treatment.

The differences in the way prescription is organised results in the prescribing health professionals being spread across numerous medical/administrative departments: in 35% of cases, the prescribing service was the UCSA and in 4% of cases an SMPR. In other words, in almost two thirds of cases (61%) the prescription of methadone is shared with, or even delegated to another service, other than the service officially responsible for the patient, including clinical departments for internal medicine or local (30%), emergency departments (13%) external CSSTs (5%) addiction departments or liaison teams (4%).

The persistent problem of the resistance shown by certain health professionals when it comes to practising substitution treatment in penal environments is encountered here as in other surveys. This is generally justified by the contradiction between the role of the penal institution and the prescription of a treatment liable to be diverted and misused. Among the 38 establishments in the sample who mentioned barriers to FPM, the most frequently encountered obstacle was a refusal to prescribe (11 establishments) related to organisational difficulties within the establishment or personal «ethical» considerations. We also encounter this hardcore of staff in «resistant» establishments in other sources [7].

The most frequently encountered problems regarding prescription are the difficulty in finding out the release date of the patient due among other things to sentence reviews (40%) the problem of short spells in detention, particularly in remand centres, which do not make it possible to monitor patients over the long term, the preference of prescribers for HDB (24%), the difficulty of finding a support service provider after release (20%) and a lack of staff (20%) which makes it difficult to organise the issuing of treatment. Finally, 9% of professionals mention the risk of an overdose as an obstacle to prescribing methadone (with the known lethal dose being approximately 1 mg/kg per day for a subject lacking in opioid tolerance¹²) while around 8% state that they prefer a withdrawal strategy (six establishments).

Standardised medical practices

The methods and conditions for issuing methadone-based treatments reveal a remarkable degree of standardisation among the practices used. The treatment is issued on a daily basis (except in an establishment, particularly a small one) under the control of a doctor or nurse except in three establishments in which it is actually given to the prisoner with no verification that it has been taken. The point of delivery is usually the infirmary (91%) with only 9% of establishments preferring to deliver it in the cells.

Among the 73 establishments (out of 98 who answered) to have replied to the ques-

Opioid substitute practices declared by the treatment services

	At least one initial prescription during the second half of 2006		At least one continuation during the second half of 2006	
	Number of establishments	% replied	Number of establishments	% replied
Méthadone	57	60.0 (n=95)	64	68.8 (n=93)
Buprénorphine haut dosage	87	89.7 (n=97)	88	92.6 (n=95)

tion concerning the dosage practices, the initial average dosage levels¹³ are 23 mg per day (minimum) and 76 mg per day (maximum). In other words, the initial minimum average dose is 3 percentage points lower than that found in a hospital environment. This clear caution is demonstrated by one figure in particular: 60% of treatment units declared minimum first dosage levels below the initial daily dosages mentioned in the 2002 circular («20 to 30 mg according to the level of physical dependency»). On the other hand, a quarter of the departments or services (generally the UCSAs) declared high maximum first dosages of at least 100 mg per day. This echoes the results obtained from international literature, which mentions high or even very high dosages of methadone (from more than 100 mg to more than 1000 mg per day) justified on pharmacological grounds for selected patients [8, 9]. Professional practices therefore appear to have changed, with up-to-date knowledge and clinical recommendations being increasingly taken into account, most studies showing the strategic importance for risk reduction, of a continuous and sufficient supply during the imprisonment period [10].

Frequently associated co-morbidity

Data concerning patient profiles, which can be more difficult to interpret due to the lower level of replies which tends to falsify the statistical analysis (only 30 establishments replied) shows that for 14% of patients FPM is used as a response to street methadone usage (62 users). Additionally, 24% of patients having received an initial methadone-based treatment in prison are (or have been) users of HDB too (including intravenously). Furthermore, it is estimated that for more

10. It should be remembered that although the sample of prisons questioned is the same, the reply rate varies from the present survey and that carried out in 2004 by the Ministry for Health [6]. Additionally, data collection methods are different (with a retrospective method based on the last half-year vs. a counting method based on a specific day).

11. Here, an explanation is useful in interpreting the size effect: the relatively short period of the survey (six months) may explain why those establishments with a low reception capacity did not have any opium-addicted prisoners among their inmate population, and consequently no opportunity to carry out initial prescription.

12. Michel (L.) Addictions aux substances psychoactives illicites-polytoxicomanies, Annales médico-psychologiques, psychology review. Volume 164, April 3, 2006, p.247-245

13. We should stress here that this question featured a non-response rate of approximately 25%

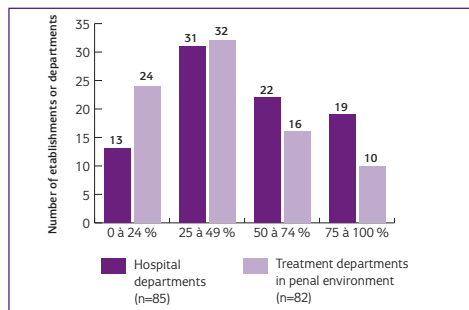
than a third of patients receiving a methadone-based treatment (35%) initial prescription offers a response to the problem of psychiatric co-morbidity (almost 6 prisoners per establishment on average, in 25 establishments). Finally, of the 22 establishments in the sample with a women's section, none mentioned a pregnant woman among the FPM recipients.

A reasonably effective support network following release

The support network offered to those leaving prison mentioned as a «fundamental» issue in the circular and which must be «envisaged with the patient at the time the prescription is issued» is operating correctly¹⁴. The post-penal guidance generally proposed to patients taking methadone involves referral to an outside CSST (278 patients out of 4874 received during a six-month period), in accordance with the instructions contained in the circular. Referrals to a GP lag far behind (86 patients), in particular in small or medium-sized establishments which get involved ahead of a hospital department (42).

Conclusion

The percentage of patients receiving methadone among the patients receiving opioid substitute treatments in hospital and penal environments



Six years after the circular of January 30, 2002, half of the prescribing hospital departments and a third of the medical departments involved in penal environments (excluding the CSSTs) declared the percentage of patients using methadone to be in excess of 50%.

The ease of access to this treatment at the hospital and in penal establishments, has significantly increased, even if this is not yet completely widespread. The average percentage of initial prescriptions (as a percentage of methadone prescriptions) totals 40% in hospital departments and 28% in penal establishments newly authorised to issue initial prescriptions. Additionally, the average levels of initial prescriptions in detention facilities is now approaching that seen outside the penal system which seems to point to a certain degree of standardisation when it comes to understanding and applying therapeutic instructions. Although the support networks for released prisoners are provided differently in penal environments (with reference to an external CSST in the vast majority of cases) and in hospital environments (referral to a GP for more than half of patients), the system works well overall. The hospital aspects of the survey consequently demonstrate the key role played by GPs both upstream (when they refer patients to hospitals to begin treatment) and downstream, via the support service.

14. Indeed, we are today well aware that the break-off of treatment upon leaving prison jeopardises the patient's chance of reintegration [11]. Since the law of 1994 which sought to encourage equivalent treatment between both open and penitentiary environments, the continuity of cover (during detention and at the end), is constantly restated and stressed by the public authorities in each ministerial or interministerial circular. concerning detention care (for example, please see the circular dated December 5, 1996 concerning the fight against HIV infection.

15. This is the case for the remand centres in Amiens Châlons-en-Champagne and Rennes, and the penitentiaries of Caen, Châteauroux, Metz, Perpignan, La Plaine des Galets on La Réunion, Point-à-Pitre/Baietu Mahault in Guadeloupe and Ducos in Martinique.

ding semi-open institutions and centres open prisons in both mainland France and the overseas regions. Of the ten establishments lacking a CSST but possessing an SMPR, the latter were contacted as a priority¹⁵. Otherwise, it was the UCSAs who replied to the survey (142). Almost 100 organisations (65%) returned usable data. Retrospective in nature, the questionnaire focused on initial prescription activities during the last six months of 2006.

Half of the opium-addicted inmates described in the survey are held in remand centres (awaiting judgment or sentenced with a remaining period of imprisonment of less than a year), a third are held in penitentiary centres (a mixed establishment with two areas offering differing detention systems: remand centres, prisons of category B and C and/or prisons of category A), more than 13% in prisons of category C (where the detention regime is focused on resocialization) and more than 3% in prisons category A (those condemned to a sentence exceeding five years, persistent criminal offenders and «dangerous» delinquents, etc).

This survey has been carried out in cooperation with the sponsor authorities (the DGS, DHOS and MILDT) working together via a steering committee to monitor the work underway.

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The «initial prescription of methadone» was defined as the initial prescription issued for a patient with no experience of this product (including patients transferred from HDB to methadone), or for a patient already consuming methadone outside a programme of treatment, or for a patient who was already taking methadone but who has not been followed up for at least three months. Methadone prescriptions issued primarily as part of an anti-pain treatment have been excluded from the scope of this survey.

The hospital survey used a questionnaire to obtain information from those departments identified as prescribing methadone based on a recent list (2006) from the Bouchara Recordati laboratory. In order to maximise the reply rate, the questionnaires were collected on site by the laboratory's research staff before being sent to the OFDT for analysis. Retrospective in nature, the questionnaires focus on initial prescription activities during 2006. A total of 86 hospital departments prescribing methadone out of a total 107 listed in France by the laboratory replied to this survey (80%). The majority of doctors interviewed were hospital practitioners (80%) vs 6% part-time hospital practitioners and 5% of contract practitioners. The penitentiary survey obtained details from the UCSAs and SMPRs for all establishments lacking a CSST (exclu-

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