COMORBIDITY AND RETENTION IN A METHADONE MAINTENANCE TREATMENT

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Backgroubd

Opiates and opioids top the list of problem drugs that cause the most burden of disease and drug-related deaths worldwide. Its use is associated with harm to individual health and society. Opioid substitution treatments (OST) are the main therapeutic interventions in heroin dependence treatment and have demonstrated efficacy in reduction illicit opioid use, risk behaviors and improving quality of life. Methadone maintenance treatments (MMT) are the most used OST in our country. However, there is a proportion of patients that are poor responders to MMT.

Purpose

To study factors associated with retention in patients admitted to a MMT program with special interest in psychiatric comorbidity.

Methods

Demographics, clinical data: cocaine and alcohol addiction, other psychiatric comorbidity, medical comorbidity (HIV, HBV and HCV infections), age of first heroin use, route of use, time until first MMT and reasons for dropout in patients consecutively admitted in an out-patient community MMT program (CAS Barceloneta, Barcelona) over 15 years were assessed. The main characteristics of the OST tretament are described in Table 1.
Patients who voluntary dropped from treatment, were analysed considering the last contact with the centre: ≤ 3 months (early dropout) and ≥ 3 months (delayed dropout).

Table 1. Main characteristics of the OST program at CAS Barceloneta

Low threshold program

- Admission based in the diagnosis of opioid addiction
- Methadone and Buprenorphine/naloxone main treatments
- Individualized opioid dosage and duration of treatment according patient's clinical course
- End of OST decided by treatment team and patient
- Take-home is highly recommended
- Forced discharge only if violence, trafficking and drug use inside the center: Patients are transferred to another centre
- Psychosocial assessment/support and screening for HIV, HCV, HBV and tuberculosis infections
- Harm reduction: Condom dispensation, syringe and needle exchange

Results

In the period analysed, a total of 545 patients have been admitted to MMT (76% men, 38+9 years at admission). At evaluation point, 393 (70%) patients were not longer in the program. Reasons for discharge: 154 (28%) moved to other centres/areas, 149 (26%) dropped out, 48 (9%) were imprisoned, 35 (6%) died and 7 were forced discharge. Mean retention time in the same MMT program was 97 months (95% CI: 87-107) – Table 2.

Table 2. Main characteristics fo the final sample

Variable	N (%)
Males (%)	413 (76)
Age at admission (years, mean ± SD)	38 ± 9
Age of 1st heroin use (years, mean ± SD)	21 ± 7
Route of use (%)	
Snorted	60 (11)
Smoked	98 (18)
Intravenous	382 (70%)
Other	5 (1%)
Time to first MMT (years, mean ± SD)	10 ± 8
Length on MMT (months, mean ± SD)	28 ± 31
Methadone dose (mg/day, mean ± SD)	64 ± 48
Cocaine use disorder (%)	240 (65)
Alcohol use disorder (%)	147 (27)
HIV Ab positive (%)	159 (29)
HCV Ab positive (%)	336 (62)
HBV S Ag positive (%)	58 (11)
Dual Diagnosis: any psychiatric disorder (%)	286 (53)
Affective Disorders (%)	65 (12)
Psychotic Disorders (%)	44 (8)
Anxiety Disorders (%)	16 (3)
Personality Disorders (%)	167 (31)
Other Disorders (%)	16 (3)
Outcome:	
Still in treatment	154 (28)
Voluntary dropout	154 (28)
Transferred to other center	148 (27)
Imprisonment	48 (9)
Death	34 (7)
Forced discharge	7 (1)

We compared 51 (33%) early vs. 103 (67%) delayed dropouts. There were no differences in terms of gender or age at admission between groups (Table 3), neither in the prevalence of other psychiatric comorbidity between them nor in the prevalence of infectious diseases. Last methadone dose administered was significantly higher in the delayed dropout group (40 mg vs. 60 mg).

Table 3. Comparission between early vs. delayed dropouts from MMT

	Early dropouts 51 (33%)	Delayed dropouts 103 (67%)	p
Males	77	89	0.837
Age at admission	36 ± 10	35 ± 10	0.863
Age of 1st heroin use	21 ± 6	23 ± 7	0.366
Intravenous heroin use	58	61	0.823
Time to 1st MMT	8 ± 5	7 ± 6	0.658
Length of present MMT	**1 ± 1**	**27 ± 26**	**<0.001**
Methadone dose (at discharge)	**40 ± 22**	**60 ± 37**	**0.003**
Cocaine use disorder	59	61	1.000
Alcohol use disorder	15	19	0.768
HIV Ab positive	12	21	0.279
HCV Av positive	57	47	0.293
Dual diagnosis	42	56	0.257

The main factor related with MMT program retention was methadone dose (p=0.032); patients that achieved doses over 80 mg/day were retained longer in the program. (Figure 1). The presence of other psychiatric diagnosis (dual diagnosis) did not influence in the retention rate (Figure 2).

Figure 1. Survival curves of retention in treatment among those with high (≥80 mg/day>) or low (<80 mg/day) of methadone.

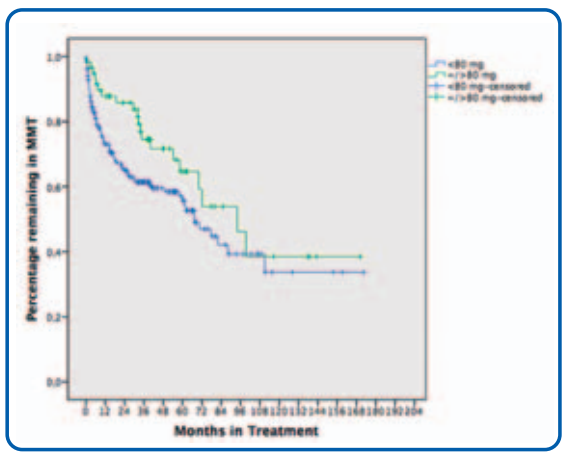
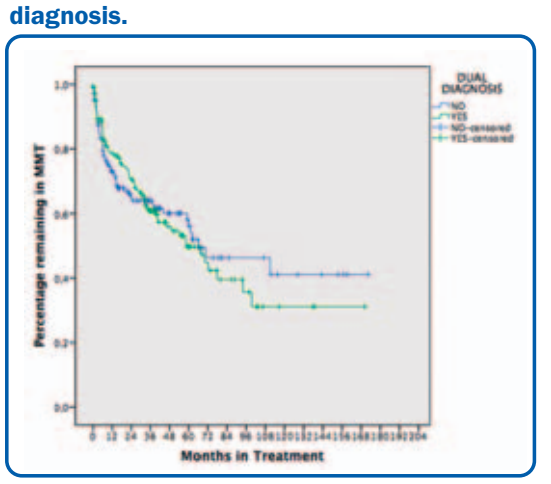


Figure 2. Survival curves of retention in treatment among those with or without dual diagnosis.



Conclusions

Methadone maintenance treatments are useful to maintain patients in treatment, even in patients with medical and psychiatric comorbidity.
The presence of comorbidity is not associated with poor retention.
Low doses of methadone have been observed in patients with early dropouts; in those patients, other therapeutic strategies, with faster titration should be considered.

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