

IMPACT OF A COMPLETE SMOKING BAN IN A DETOXIFICATION UNIT: A 6 MONTHS EVALUATION STUDY

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BACKGROUND AND OBJECTIVES

Tobacco use is one of the main risk factors for mortality and morbidity¹. In Spain, the implementation of the Law 42/2010, which bans the use of tobacco in any health resource,² including mental health units, has supposed a challenge for those units.

The objective of this study is to evaluate the impact at 6 months of discharge, of the implementation of a complete smoking ban in a Detoxification Unit (DU).

MATERIAL AND METHODS

Prospective study. All admitted patients between January and June 2011 at the DU of Hospital del Mar (Barcelona, Spain) were included. Sociodemographic, clinical data were recorded. Also, severity of nicotine addiction with Fagerström test and the use of Nicotine Replacement Therapy (NRT) required. Six months after hospital discharge, patients were contacted by telephone to assess the tobacco use, the Fagerström and Richmond (abstinence motivation) tests.

RESULTS

The final sample consisted in 62 admissions (79% males; 45±10 years). The main drugs of admission were alcohol (54,8%), cocaine (16,1%), heroin (16,1%). The 94% of patients were nicotine dependent (**Figure 1**).

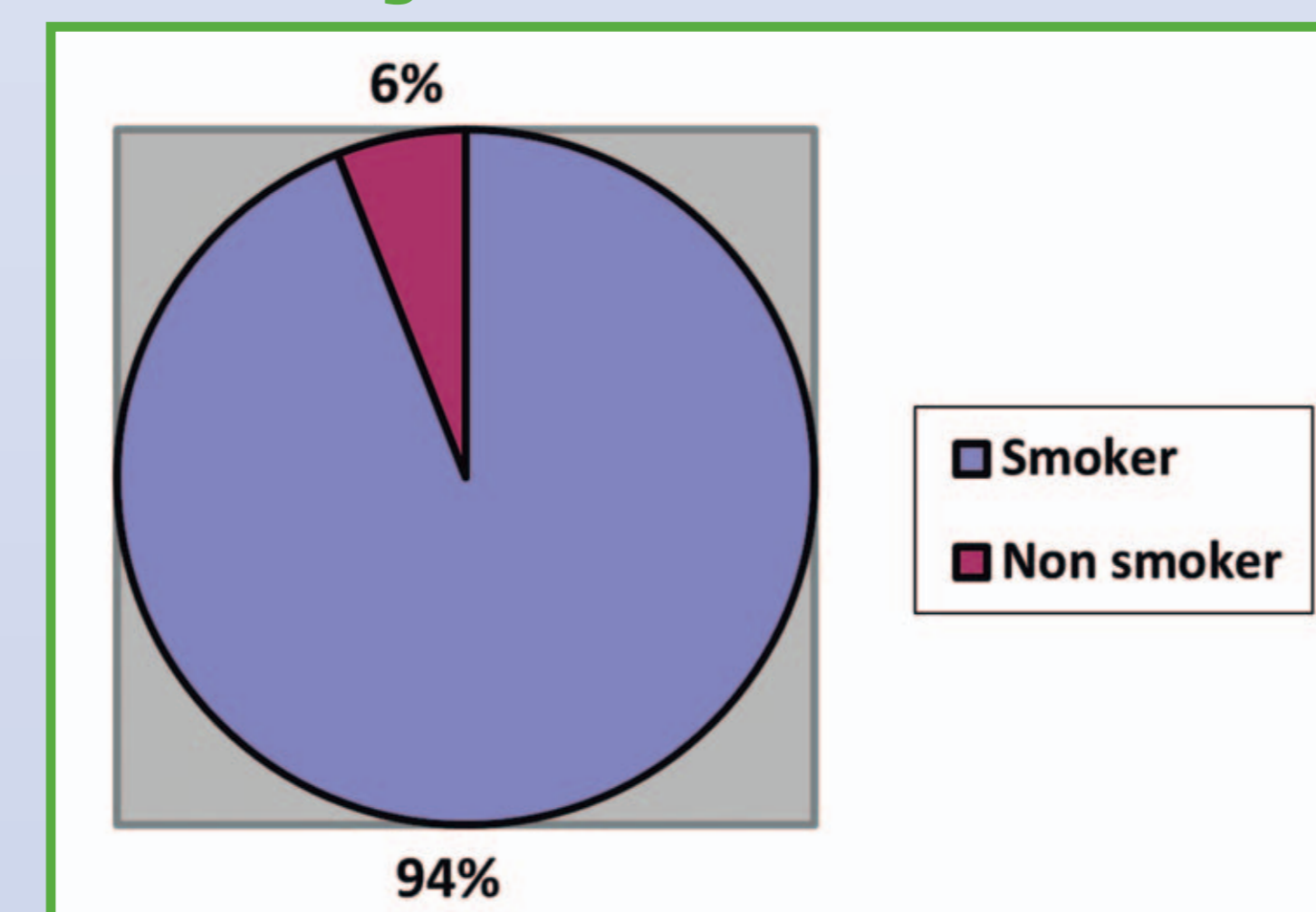
The 87% required NRT during detoxification (91% combined). Treated patients smoked a mean of 23±11 cigarettes/day, Fagerström test at admission: 7±3 (severe dependence). In the **Table 1** we present the main characteristics of patients that received NRT versus those who had not.

Table 1. Main characteristic of patients treated with NRT compared to those non treated

	NRT N = 54	No NRT N = 8	P*
Males (%)	42 (78)	7 (88)	1,000
Age (mean ± SD)	44±9	50±13	0,107
Work status (%)			0,153
-Working	7 (13)	0 (0)	
-Not working	11 (20)	0 (0)	
-Receiving a pension	36 (67)	8 (100)	
Cigarettes / day (baseline) (mean ± SD)	23±11	7±14	0,001
Fagerström test (mean ± SD)	7±3	2±4	< 0,001
Severity of dependence (Fagerström) (%)			0,008
-Low severity (≤4)	8 (18)	5 (38)	
-Median severity (5-6)	6 (14)	1 (14)	
-High severity (≥7)	30 (68)	1 (14)	
Mean drug of detoxification (%)			0,875
-Alcohol	29 (54)	5 (62)	
-Cocaine	8 (15)	2 (20)	
-Heroin	9 (17)	1 (12)	
-Cannabis	2 (4)	0 (0)	
-Sedatives	2 (4)	0 (0)	
-Methadone suppression	4 (7)	0 (0)	
Other Non-SUD psychiatric disorders (%)			0,873
-Axis I	10 (18)	1 (12)	
-Axis II	7 (13)	2 (25)	
-Axis I and II	4 (7)	1 (12)	
Medical comorbidity (%)			1,000
-HIV	11 (20)	1 (12)	
-HCV	20 (37)	2 (25)	0,700
-Chronic liver disease	15 (28)	2 (25)	1,000
Detoxification completed (%)	39 (72)	4 (50)	0,235

* Bold numbers represent statistically significant results. NRT: Nicotine Replacement Therapy; SD: Standard deviation, SUD: substance use disorder; HIV: Human immunodeficiency virus infection; HCV: hepatitis C virus infection

Figure 1. Percentage of smoker vs. Non smoker patients



After 6 months, 18 (33%) were contacted. There were no differences between localized and non-localized patients (**Table 2**).

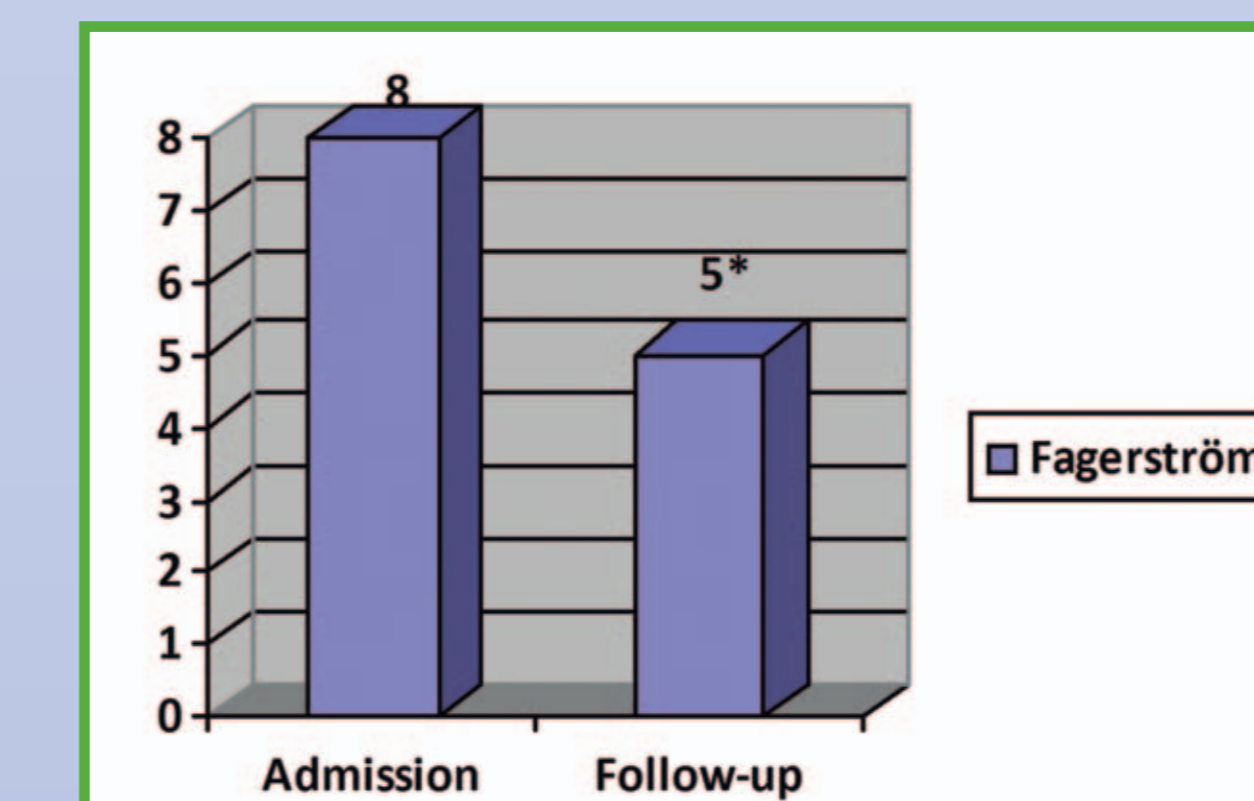
Table 2. Comparative of baseline characteristics of localized patients at follow-up compared to those non localized.

	Localized patients N=18	Non localised patients N = 36	P*
Males (%)	13 (72)	29 (81)	0,506
Age (mean ± SD)	42±9	44±9	0,431
Work status (%)			0,032
-Working	3(17)	4(11)	
-Not working	0(0)	11(31)	
-Receiving a pension	15(83)	21(58)	
Cigarettes / day (baseline) (mean ± SD)	26±10	22±11	0,213
Fagerström test (mean ± SD)	8±2	6±3	0,115
Severity of dependence (Fagerström)			0,264
-Low severity (≤4)	2(12)	6(22)	
-Median severity (5-6)	1(6)	5(18)	
-High severity (≥7)	14(82)	16(59)	
Mean drug of detoxification (%)			0,819
-Alcohol	11(61)	18(50)	
-Cocaine	3(17)	5(14)	
-Heroin	2(11)	7(19)	
-Cannabis	1(6)	1(3)	
-Sedatives	0(0)	2(6)	
-Methadone suppression	1(6)	3(8)	
Other Non-SUD psychiatric disorders (%)			0,399
-Axis I	5 (11)	5 (14)	
-Axis II	1 (6)	6 (17)	
-Axis I and II	2 (11)	2 (6)	
Medical comorbidity (%)			0,475
-HIV	5 (28)	6 (17)	
-HCV	8 (44)	12 (33)	0,552
-Chronic liver disease	6 (33)	9 (25)	0,536
Detoxification completed (%)	11 (61)	28 (78)	0,216

* Bold numbers represent statistically significant results. SD: Standard deviation, SUD: substance use disorder; HIV: Human immunodeficiency virus infection; HCV: hepatitis C virus infection

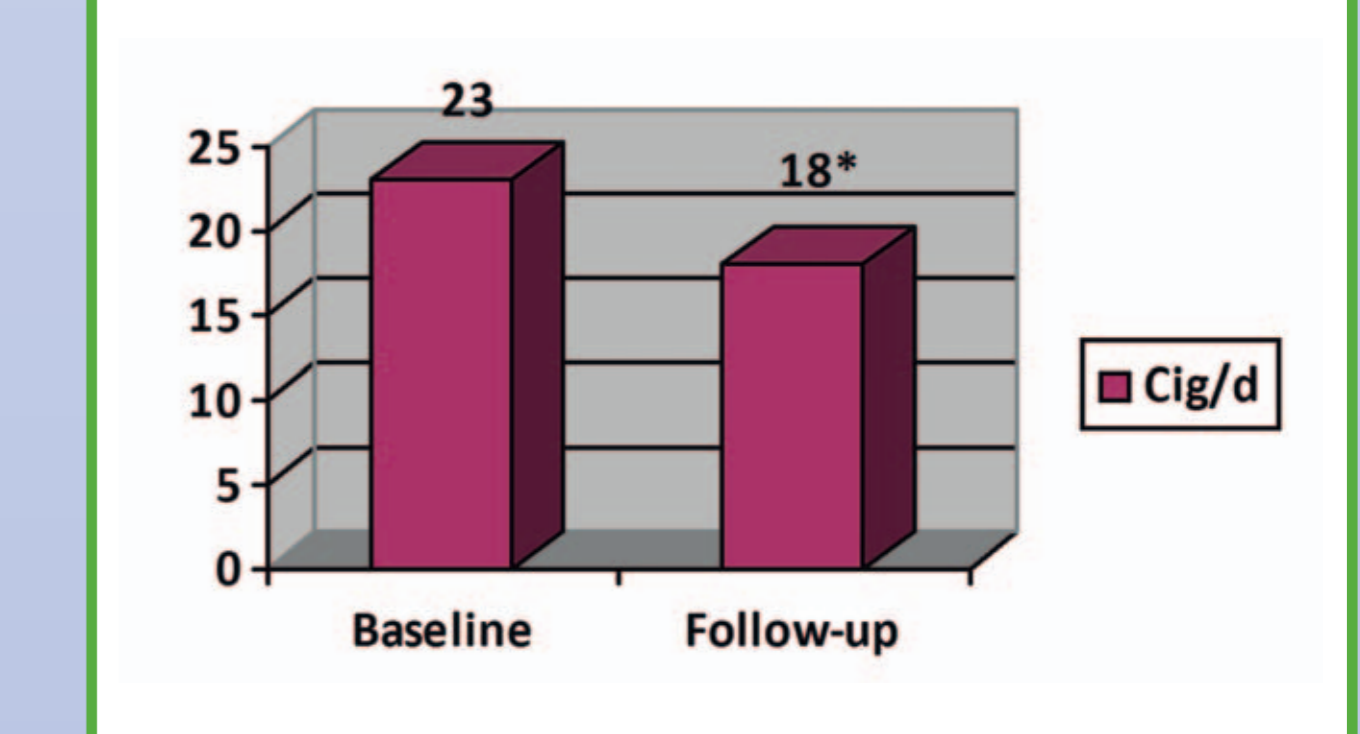
Fagerström at follow-up in the 18 localized patients, was 5±2 (moderate dependence) (**figure 2**), the mean cigarettes per day: 18,2±10. Richmond 5±3 (moderate motivation towards abstinence). Three patients remained tobacco abstinent after discharge during 2, 90 and 120 days respectively.

Figure 2. Fagerström test scores in localized patients at admission and at follow-up



* p <0,001

Figure 3. Mean cigarettes/day smoked at baseline and follow-up



* p <0,001

CONCLUSIONS

- The majority of patients that are admitted in a DU required NRT, mostly combined.
- After discharge, without treatment for tobacco dependence, only 2 patients remained abstinent more than 90 days.
- However, the severity of addiction decreased at follow-up and patients presented a moderate motivation towards a new quit trial.
- These results suggest the importance to offer nicotine dependence treatment after a detoxification discharge.

REFERENCES

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2. BOE-A-2010-20138. Ley 42/2010. BOE núm. 318 de 31/12/2010, pp.109188 -109194.

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