Patterns and predictors of nicotine replacement therapy use among alcohol and other drug clients

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Introduction

- Tobacco smoking in alcohol and other drug (AOD) clients is high (84.1%)
- Nicotine replacement therapy (NRT) is an effective first-line pharmacological support for smoking cessation in the general population.
- Use of nicotine replacement therapy (NRT) improves quit rates but these supports are often infrequently delivered during alcohol and other drug (AOD) treatment.
- An organisational change intervention was implemented to address structural and cultural barriers to systematic provision of smoking cessation care such as NRT during AOD treatment.

Aim

This study examined NRT use, frequency of NRT use, and predictors of NRT use (at least one form of NRT versus no NRT).

Method

The study was part of a larger RCT of an organisational change intervention in 32 AOD programs in Australia.

Of the 896 participants who completed a baseline survey, 471 completed 6 week follow-up telephone survey and 427 completed the 6 month survey.

Descriptive analyses for demographics and smoking behaviours in all respondents were conducted from baseline survey responses.

Descriptive statistics are presented for NRT use at 6 week and 6 months, frequency of NRT use, and combination NRT use.

Discussion

- Smokers who received treatment from an intervention site was the most robust predictor of NRT use post discharge (at both 6 week and 6 months). Encouraging use during AOD treatment may promote smoking cessation efforts post discharge.
- Routine provision of NRT in AOD treatment may have significant impacts on smoking cessation outcomes and cost saving to the healthcare system.

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Overview of the sample n=896

Demographics

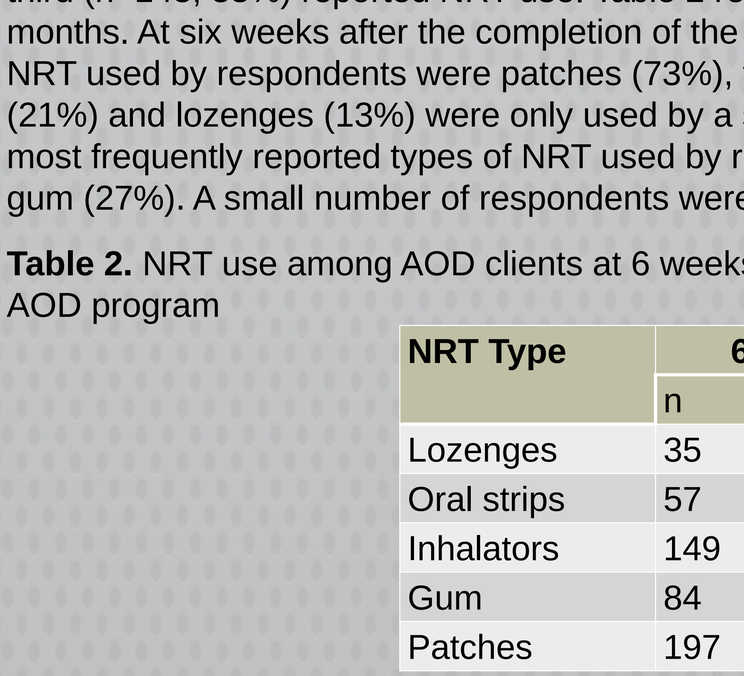

Table 1. Respondent smoking characteristics

Characteristic	Class/statistic	n, %
Smoking status	Daily	856, 96%
	Occasional	40, 4%
Cigarettes per day	Median (Q1, Q3)	20 (1,55)
HSI	Low	242, 28%
	Moderate	427, 50%
	Heavy	191, 22%
Quit attempts in last 12 months	Yes	619,81%
Motivation to quit	Mean (SD)	6(3)
Quit intentions	Quit <30 days	377, 42%
	Quit <6 months	276, 31%
	Quit but not in next 6 months	74, 8%
	Never quit	18, 2%
	Don't know	125,16%

Results

NRT Use

At six weeks just over half (n=269, 57%) of all respondents reported using NRT and at six months one-third (n=143, 33%) reported NRT use. Table 2 reports the types of NRT used at both six weeks and six months. At six weeks after the completion of the baseline survey, the most frequently reported types of NRT used by respondents were patches (73%), followed by inhalators (55%), and gum (31%). Oral strips (21%) and lozenges (13%) were only used by a small number of respondents. Again, at six months the most frequently reported types of NRT used by respondents were patches (62%), inhalators (36%), and gum (27%). A small number of respondents were using lozenges and oral strips (both 11%).

Table 2. NRT use among AOD clients at 6 weeks (n=269) and 6 months (n=143) post-discharge from an AOD program

NRT Type	6 week		6 month	
	n	%	n	%
Lozenges	35	13	16	11
Oral strips	57	21	16	11
Inhalators	149	55	52	36
Gum	84	31	39	27
Patches	197	73	89	62

Frequency of NRT use

Of the respondents using NRT, it was most frequently reported to be used every day (n=192) at six weeks. A smaller number of respondents chose to use NRT a couple of days of the week (n=31) and most days of the week (n=30).

Combination NRT use

At six weeks, nearly two-thirds (65%, n=174) of all respondents reporting any form of NRT use reported using combination NRT. At six months, nearly half (45%, n=65) of all respondents reported using combination NRT.

Predictors of NRT use (at least one form of NRT versus no NRT)

At six weeks, participants who had a heavier nicotine dependence (OR 1.77 95%CI 1.1, 2.8; p=0.016) compared to those with low nicotine dependence, were more motivated to quit (OR 1.19 95%CI 1.0, 1.14; p=0.014) than those less motivated and those from the treatment group compared to the control group (OR 3.71, 95CI 1.8, 7.5; p<.001) had greater odds of reporting that they used NRT. At six months, participants from the treatment group had three times greater odds of reporting that they has used NRT than those in the control group (OR 3.38, 95%CI 1.9, 6.1; p<.001).

Table 3. Predictors of NRT use (at least one form of NRT versus no NRT)

Characteristics		6 week n=446			6 month n=405		
		NRT use %	OR 95%CI	p-value	NRT use %	OR 95%CI	p-value
Education	Secondary or less (ref)	184 (58.6%)		0.108	81 (28.6%)		0.012
	Tertiary qualifications	85 (54.1%)	0.71 (0.5, 1.1)		62 (43.1%)	2.17 (1.2, 3.9)	
HSI	Low (ref)	59 (44.7%)		0.016	34 (29.3%)		0.531
	High/ Moderate	195 (61.1%)	1.77 (1.1, 2.8)		103 (35.2%)	1.22 (0.7, 2.3)	
Motivation to quit	Per 1 unit increase		1.19 (1.0, 1.4)	**0.014**		1.06 (1.0, 1.2)	0.180
Intervention group	Control (ref)	98 (41.9%)		**<.001**	46 (21.0%)		<.001
	Treatment	171 (72.2%)	3.71 (1.8, 7.5)		97 (46.6%)	3.38 (1.9, 6.1)	