

QUIT SMOKING? QUIT DRINKING? WHY NOT QUIT BOTH? Analysis of perceptions among Belgian Postgraduates in Psychiatry

Denis Jacques, Nicolas Zdanowicz, Christine Reynaert & Pascal Janne

Catholic University of Louvain, Mont-Godinne Clinics, psychosomatic unit, 5530 Yvoir, Belgium

SUMMARY

Introduction: *Concurrent alcohol and tobacco dependency appears to be a common phenomenon yet medical literature often focuses on only one substance at a time when examining the question of withdrawal and illustrates that the evaluation of tobacco consumption appears to be overlooked in psychiatry.*

Subject and methods: *In this study, we analyse perceptions among first-year postgraduates in Psychiatry, before and after training in Motivational Interviewing, with regard to the idea of suggesting that patients might consider simultaneous dual alcohol-tobacco withdrawal.*

Results: *The trend is to disregard the systematic history of substance consumption and to not recommend concurrent alcohol-tobacco withdrawal. Motivational interview training tends to reverse this trend.*

Discussion: *The lessening of the therapist's feeling of powerlessness in the face of relapse is one of the explanatory factors behind this change of approach. A study design is proposed focusing on the patient's perceptions.*

Conclusion: *Guidelines concerning dual alcohol-tobacco withdrawal programs are to be developed*

Key words: *alcohol-tobacco-motivational - interviewing-withdrawal*

* * * * *

Introduction

In medical literature, the question of addiction is often approached one substance at a time. In clinical practice, patients with dependency problems generally consume several drugs. While smoking is common in patients in psychiatry, treatment appears often to be neglected with regard to both systematic history and follow-up notes (Wye et al. 2010). Tobacco appears to be considered a less harmful alternative to alcohol or drug consumption, while the literature demonstrates that it is a factor of poor prognosis for mental and physical health (Prochaska 2010). In the field of mental health, the lack of treatment for tobacco addiction is real and evidence-based treatments need to be developed. Among adolescents, the three most frequently consumed substances are tobacco, alcohol and marijuana (Latimer & Zur 2010). In this area, prevention treatment increasingly proposes multi-substance programs (Leatherdale & Ahmed 2010). In a study concerning the general U.S. population, 48% of alcohol-dependent people are reported to also be tobacco-dependent. (Le Start et al. 2010). Among alcoholic patients seeking treatment in the U.S., there is an estimated prevalence of 80% of smokers (Chatterjee & Barlett 2010). In a study conducted in Belgium, 82% of patients hospitalised for alcohol withdrawal have nicotine dependence (van den Abeele et al. 2008). The acuteness of nicotine dependence could even be a clinical indicator of alcohol-related problems among adolescent smokers (Leeman et al. 2010). The interactive effect of alcohol and nicotine has been demonstrated on the cholinergic system in rats' brains and explains this frequent association (Jama et al. 2010).

Their respective action on the reward circuit at mesolimbic level appears to facilitate concurrent alcohol and tobacco consumption (Laitha & Sershen 2010). These factors are at the origin of the exploration of the notion of integrated treatment for alcohol and nicotine dependence (Kalman et al. 2010). Motivational interviewing has already been evaluated in the context of treating alcohol dependency, while also concerning the cessation of tobacco consumption (Lai et al. 2010). How should the motivational interview take shape and in what manner should it be adapted in the perspective of dual alcohol and tobacco withdrawal? Given the correlation between the consumption of the two substances, relapse prevention strategies need to integrate an approach focused on both alcohol and tobacco (Kahler et al. 2010). This study is the first in a series of three which aim to evaluate perceptions among therapists with regard to the possibilities of suggesting that patients consider stopping both alcohol and tobacco substances in dual-dependency situations. It will focus on analysing perceptions among postgraduates in Psychiatry. The discussion will address the design of two other studies, which will concern perceptions among post-graduates in internal medicine as well as perceptions among patients.

Subjects and methods

The study was conducted over a five year period (recruitment between October 2005 and October 2010) and concerned perceptions among twelve first-year postgraduates in Psychiatry who had not received motivational interview training. At time 0 the participants were given a questionnaire containing 25

items evaluating their perceptions with regard to alcohol and tobacco dependency, making use of visual analog scales. This publication will focus on the analysis of three of these items, expressed as follows:

1. "You feel helpless when faced with a patient with an alcohol dependency who relapses after a period of abstinence": Very rarely - Very often;
2. "For each consultation, during the anamnesis, you systematically question consumption habits (alcohol, tobacco, cannabis, heroin, cocaine, etc)": Never – Always;
3. "In cases of dual-dependency (alcohol and tobacco), you advise the patient to consider cessation of both substances simultaneously": Never – Always.

The same training in motivational interviewing techniques was given to those participating in the study over a one year period, covering: basic theory of motivational interviewing, theory of the reward circuit, neurobiological bases for phenomena of alcohol and nicotine dependency and exercises in the form of filmed role plays which are subsequently reviewed (10 training sessions in total).

After one year (time 1) and at the end of the training period, the Postgraduates were asked to complete the questionnaire again.

We then drew a comparison between the results before and after training.

Results

The results were processed with t-student test For the population of candidate doctors specialising in Psychiatry (n=12), based on an analog visual scale:

Table 1. Analog visual scale

n=12	Average
Pair 1	
Advise the cessation of both substances Time 0	1.1583
Advise the cessation of both substances Time 1	6.5333
Pair2	
Systematic anamnesis of consumption habits Time 0	4.7667
Systematic anamnesis of consumption habits Time 1	8.1750
Pair3	
Helpless feelings faced relapse Time0	6.6417
Helpless feelings faced relapse Time1	3.9417

To the question "In cases of dual-dependency (alcohol and tobacco), you advise the patient to consider cessation of both substances simultaneously ": Never-Always; the response rate at time 0 is 1,1583 on average and increases to 6,5333 at time 1.

To the question " For each consultation, during the anamnesis, you systematically question consumption habits (alcohol, tobacco, cannabis, heroin, cocaine, etc)": Never - Always; the response rate at time 0 is 4,7667 on average and rises to 8,1750 at time 1.

To the question "You feel helpless when faced with a patient with an alcohol dependency who relapses after a period of abstinence": Very rarely - Very often; the response rate at time 0 is 6,6417 on average and decreases to 3,9417 at time 1.

The results were significant.

Table 2. Statistical difference in attitudes of subjects over time

	t-student Average	Ecart Type	t	Sig.
Pair 1				
Advise the cessation of both substances Time 0 - Time 1	-5.37500	1.80158	-10.335	0.000
Pair 2				
Systematic anamnesis of consumption habits Time 0 - Time 1	-3.40833	3.02639	-3.901	0.002
Pair 3				
Helpless feelings faced relapse Time0 - Time 1	2.70000	1.66515	5.617	0.000

Discussion

With regard to systematic anamnesis during a first consultation of substance consumption habits (notably with tobacco), our results confirm a distinct trend in the literature to disregard, in Psychiatry, the evaluation and documentation of tobacco consumption habits in the medical record. After one year's training in motivational interviewing, this dimension shows a distinct improvement.

The notion of suggesting that the patient consider cessation of both substances (alcohol and tobacco) in theory seems scarcely conceivable at time 0 for the postgraduates. After a year, this trend appears to reverse.

One might wonder why the spontaneous trend is to discourage quitting both substances simultaneously: fear of the consequences for the patient? The impression that the task is too difficult? Lack of training? Habit: deal with one problem at a time?

In the literature, data concerning the animal model (Lallemand et al. 2006) tends to demonstrate that the cerebral suffering from a physiological point of view is less significant when dependent rats undergo alcohol and tobacco withdrawal simultaneously than when they undergo withdrawal from only one substance at a time. For humans, this question needs to be evaluated and complemented in the light of the emotional implications of stopping consumption compulsions.

One explanation for the change in perceptions with regard to suggesting simultaneous cessation of alcohol and tobacco, after skills have been acquired during training, could reside in evolutions in feelings of helplessness among postgraduates when faced with relapse.

The observed decrease in the degree of feelings of helplessness demonstrates the impact of motivational interviewing training, which equips the therapist with broader possibilities for maintaining a professional and empathic attitude when analysing reasons for relapse together with the patient.

In 1996, Miller WR highlighted that the therapist's empathy was a highly predictive factor in the development of the treatment of patients with dependency. We could make the hypothesis that training in motivational interviewing technique, by lessening the sensation of helplessness among therapists, facilitates envisaging withdrawal from several substances.

The design of our study will be complemented by applying therapeutic alliance scale at time 0 and at time 1 to evaluate this dimension.

We plan to conduct the same protocol on a population of postgraduates in internal medicine and to evaluate whether the results are comparable. In a third phase, we will focus on the perceptions of the patient with regard to the question of envisaging the cessation of both alcohol and tobacco. The study will concern the evaluation of perceptions among patients with both alcohol and tobacco dependency following an initial consultation: therapeutic alliance scale, 'readiness to change' questionnaire and analog visual scale concerning envisaging the cessation of alcohol consumption, tobacco consumption, and both. The control group will consist of first-year postgraduates who have not received training in motivational interviewing, versus a group of first-year postgraduates who have received training in motivational interviewing.

Conclusion

Our results show that first-year postgraduates in Psychiatry tend spontaneously to disregard the systematic history of substance consumption including tobacco. When confronted with a patient with dual alcohol-tobacco dependency, the spontaneous trend is to discourage the notion of concurrent withdrawal. Following a year of training in motivational interviewing, this trend is reversed. There are many reasons for the reversal of this attitude which depend on several

factors. We have focused on one particular factor: the therapist's feeling of helplessness in the face of a patient's relapse, which is altered after motivational interviewing training. After analysing the factors deterring therapists from suggesting withdrawal from several substances, we purport to assess the impact of this proposal for patients with dual alcohol and tobacco dependencies. This analysis could be the basis for redefining and adapting certain aspects of motivational interviewing technique in cases of dual dependency. Drug guidelines in the context of combined alcohol-tobacco withdrawal will need to be evaluated and craving intensity levels will need to be measured among patients in dual-withdrawal.

References

1. Chatterjee S, Barlett SE: *Neuronal nicotinic acetylcholine receptors as pharmacotherapeutic targets for the treatment of alcohol use disorders*. *CNS & Neurological Disorders Drug Targets*, 2010; 9: 60-76.
2. Jamal M, Ameno K, Miki T, Tanaka N, Ohkubo E, Kinoshita H: *Effects of systemic nicotine, alcohol or their combination on cholinergic markers in the frontal cortex and hippocampus of rat*. *Neurochemical Research*, 2010; 35: 1064-70.
3. Kahler CW, Spillane NS, Metrik J: *Alcohol use and initial smoking lapses among heavy drinkers in smoking cessation treatment*. *Nicotine and Tobacco research*, 2010; 12: 781-5.
4. Kalman D, Kim S, DiGirolamo G, Smelson D, Ziedonis D: *Addressing tobacco use disorder in smokers in early remission from alcohol dependence: the case for integrating smoking cessation services in substance use disorder treatment programs*. *Clinical Psychology Review*, 2010; 30: 12-24.
5. Lai DT, Cahill K, Qin Y, Tang JL: *Motivational interviewing for smoking cessation*. *Cochrane Database of Systematic review*, 2010; 20: CD006936
6. Laitha A, Sershen H: *Nicotine: alcohol reward interactions*. *Neurochemical Research*, 2010; 35: 1248-58.
7. Lallemand F, Ward R, Dravolina O, De Witte: *Nicotine-induced changes of glutamate and arginine in naive and chronically alcoholized rats: an in vivo microdialysis study*. *Brain Research*, 2006; 1111: 48-60.
8. Latimer W, Zur J: *Epidemiologic trends of adolescent use of alcohol, tobacco, and other drugs*. *Child and adolescents psychiatric clinics of North America*, 2010; 19: 451-64.
9. Leatherdale ST, Ahmed R: *Alcohol, marijuana, and tobacco use among Canadian youth: do we need more multi-substance prevention programming?* *The Journal of Primary Prevention*, 2010; 31: 99-108.
10. Leeman RF, Schepis TS, Cavallo DA, Mc Fetridge AK, Liss TB, Krishnan-Sarin S: *Nicotine dependence severity as a cross-sectional predictor of alcohol-related problems in a sample of adolescent smokers*. *Nicotine and Tobacco Research*, 2010; 12: 521-4.
11. Le Start Y, Ramoz N, Gorwood P: *In alcohol-dependent drinkers, what does the presence of nicotine dependence tell us about psychiatric and addictive disorders comorbidity?* *Alcohol and Alcoholism*, 2010; 45: 167-72.

12. Miller WR: Motivational interviewing: research, practice and puzzles. *Addictive Behaviors*, 1996; 21: 835-842.
13. Prochaska JJ: Failure to treat tobacco use in mental health and addiction treatment settings: a form of harm reduction? *Drug and Alcohol dependence*, 2010; 110:177-82.
14. van den Abeele I, Verbanck P, Hanak C, Noël X: Dépendance alcoolique avec ou sans tabac points communs et spécificités. *Alcoologie et Addictologie*, 2008; 30: 191-96.
15. Wye P, Bowman J, Wiggers J, Baker A, Carr V, Terry M, Knight J, Clancy R: An audit of the prevalence of recorded nicotine dependence treatment in an Australian psychiatric hospital. *Australian New Zealand journal of public health*, 2010; 34:298-303.

Correspondence:

Denis Jacques, MD
Mont-Godinne University Clinics, psychosomatic unit
5530 Yvoir, Belgium
E-mail: denis.jacques@uclouvain.be