

## Perceptions, professional responsibility and management experiences of patients with alcohol, tobacco and opioid use disorder by residents in general practice and teaching general practitioners

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### KEY MESSAGES

- Tobacco smokers were considered to have greater responsibility for their disorder than alcohol or opioid users.
- Few practitioners felt capable of managing patients for alcohol or opioid use disorders.
- Teaching GPs and final-year residents did not seem to differ much in their perception regarding SUDs.

### ABSTRACT

**Background:** Substance use disorders (SUDs) are based on pathophysiological mechanisms common to all psychoactive substances. However, general practitioners (GPs) hold different views depending on the substance in question.

**Objectives:** To determine whether the perceptions that teaching GPs and final-year residents in general practice have of patients with a SUD vary according to the substance involved and explore their professional responsibility and management experiences.

**Methods:** A cross-sectional observational study was carried out by asking residents and teaching GPs from eight faculties of medicine about their perceptions, professional responsibility and management experience of patients with tobacco, alcohol and opioid use disorders, using an online questionnaire between June and September 2017.

**Results:** The responses of 238 teaching GPs (mean age 50 years SD 3.5; 58% men) and 327 residents (mean age 28 years SD 9.9; 67% women) were analysed (response rates: 9 and 15% respectively). Tobacco smokers were considered to be more responsible for their acts than the other users. Teaching GPs and residents considered that it was their responsibility to discuss substance use. They did not feel able to manage alcohol and opioid use disorders. Tobacco cessation was mainly managed alone (78%). The results were quite similar among teaching GPs and residents.

**Conclusion:** The majority of practitioners had no difficulty managing smoking cessation. During the management of alcohol and particularly opioid use disorders, practitioners did not feel competent. The gap between their perceived responsibility and competencies should be addressed by training and promoting collaborative care.

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## Introduction

Substance use disorders (SUDs) are based on pathophysiological mechanisms and environmental factors, common to all psychoactive substances (role of dopamine, impact of familial and psychiatric factors, etc.). However, general practitioners (GPs) seems to hold different views depending on the substance in question [1]. Previous studies found that GPs were more sympathetic to patients with alcohol problems and less favourable towards opiate users [1]. In addition, GP involvement in the prevention [2], diagnosis and management of SUDs has also been shown to vary according to the substance in question [3, 4].

Young doctors have been described as stigmatising less their patients with SUDs than older doctors [1], suggesting that experience may modify GPs' attitudes towards SUDs.

We are not aware of any recent research that answers the question whether the specific psychoactive substance used by the patient influences the perception, professional responsibility and management experiences of GPs in patients with SUD. We also wanted to investigate whether, on this point, experienced GPs differ from residents in general practice.

First, we aimed to determine whether the perceptions that teaching GPs and final-year residents in general practice have of patients with a SUD vary according to the substance involved. Second, we wanted to explore their professional responsibility and management experiences with the management of SUDs.

## Methods

### Study design

We conducted a multicentre cross-sectional observational study throughout France in 2017. We used a self-administered online questionnaire to evaluate the perceptions, professional responsibility and management experience of final-year residents (graduated physicians who are in training to become a specialist in family medicine) and teaching GPs in the field of SUD. In France, care for people with SUD is shared between GPs and specialised addiction centres. GPs did not require supplementary education or special licencing to manage patients with SUD; for opioid use disorder particularly, any GP can prescribe buprenorphine for a beginning of treatment or a renewal and can prescribe methadone for a renewal. We focussed our work on the three psychoactive substances that

account for the greatest number of consultations in general practice: tobacco, alcohol and opioids (including painkillers and illegal drugs) [3].

### Questionnaire

The questionnaire developed was based on a Delphi round, a structured method to obtain consensus on the composition of the study questionnaire based on expert opinion. The phase was conducted with eight GPs who were experts in the field of addictology and lecturers in six different medical schools.

The final questionnaire consisted of nine questions divided in 4 parts: (1) baseline and demographic data (age, gender, teaching GP or resident); (2) perceptions; (3) professional responsibility; (4) management experiences.

Practitioners' perceptions (second part of the questionnaire, [Table 1](#)) were studied by asking them to indicate their position on a continuous visual analogue scale (VAS) from 0 to 100, on three items: (1) patient's responsibility for their SUD, 'the patient is a victim of his/her environment (0: 'fully victim') to 'the patient is responsible for his/her choices (100: 'fully responsible'); (2) 'I find it easy to approach substance use with a patient who does not talk about it spontaneously' (0 fully disagree, 100 fully agree); and (3) 'I feel capable of managing this patient' (0 fully disagree, 100 fully agree).

The third part on professional responsibility ([Table 1](#)) consisted of a VAS scale on respondents' position on approaching substance use with a patient who does not talk about it spontaneously ('it's my responsibility to do so,' 0 fully disagree, 100 fully agree).

The fourth part on management experiences, presented in [Table 2](#), consisted of two questions on experience of cessation (at least one experience of management/never managed any patient) and practices according to cessation management (single-handed management/management in collaboration with another structure/not usually managed any patient).

### Population

The questionnaire was sent to teaching GPs contacted through all the academic departments of general practice and to final-year residents in general practice contacted through the university administrative services of all French Medical Faculties.

We invited the students enrolled in their third year of residency for the 2016/2017 university year to

**Table 1.** Perceptions, professional responsibility according to substance by teaching GPs and residents.

Perceptions	Teaching GPs (n = 238)				Residents (n = 327)			
	Tobacco Mean score (SD)	Alcohol Mean score (SD)	Opioids Mean score (SD)	p Values <sup>a</sup>	Tobacco Mean score (SD)	Alcohol Mean score (SD)	Opioids Mean score (SD)	p Values <sup>a</sup>
Patient's responsibility, score 1-100 (1 = fully victim, 100 = fully responsible)	59 (23)	54 (23)	54 (24)	0.0001 <sup>b</sup> 0.0002 <sup>c</sup> 0.9722 <sup>d</sup>	60 (23)	53 (22)	53 (25)	0.0001 <sup>b</sup> 0.0001 <sup>c</sup> 0.8557 <sup>d</sup>
'I find it easy to approach substance use with a patient who does not talk about it spontaneously' (0 fully disagree, 100 fully agree)	89 (15)	69 (23)	61 (29)	0.0001 <sup>b</sup> 0.0001 <sup>c</sup> 0.0001 <sup>d</sup>	85 (17)	62 (23)	52 (25)	0.0001 <sup>b</sup> 0.0001 <sup>c</sup> 0.0001 <sup>d</sup>
'I feel capable of managing this patient' (0 fully disagree, 100 fully agree)	77 (19)	60 (24)	42 (30)	0.0001 <sup>b</sup> 0.0001 <sup>c</sup> 0.0001 <sup>d</sup>	65 (22)	46 (22)	33 (23)	0.0001 <sup>b</sup> 0.0001 <sup>c</sup> 0.0001 <sup>d</sup>
Professional responsibility 'it's my responsibility to do so' (0 fully disagree, 100 fully agree)	92 (10)	87 (16)	79 (24)	0.0001 <sup>b</sup> 0.0001 <sup>c</sup> 0.0001 <sup>d</sup>	90 (12)	86 (15)	81 (21)	0.0001 <sup>b</sup> 0.0001 <sup>c</sup> 0.0001 <sup>d</sup>

<sup>a</sup>pairwise comparisons using matched student t-test or the non-parametric Wilcoxon rank sum test, with adjusted threshold for the p-value after Bonferroni correction: 0.0167.

<sup>b</sup>p-value associated with pairwise comparisons tobacco vs. alcohol.

<sup>c</sup>p-value associated with pairwise comparisons tobacco vs. opioids.

<sup>d</sup>p-value associated with pairwise comparisons alcohol vs. opioids.

participate in our study. The questionnaire was sent to eight faculties of medicine, for 2,134 residents and 2,616 teaching GPs. It was sent by e-mail (a first e-mail, followed by a reminder 15 days later). Responses were received between June 12 and September 15, 2017.

### Outcome measures

The principal outcome measure was a comparison of the perceptions, by final-year residents in general practice and teaching GPs, of the patient's level of responsibility in his/her tobacco, alcohol or opioid use disorder. The secondary outcome measures were the practitioner's professional responsibility and management experiences related to the different substances.

### Statistical analysis

Data analysis was performed using SAS version 9.4 software. Only fully completed questionnaires were analysed. Continuous variables were reported using means and standard deviations. Categorical variables were presented as numbers and percentages.

We performed matched comparisons of the variables relating the three substances provided by each respondent (tobacco vs. alcohol, tobacco vs. opioids, alcohol vs. opioids), separately in each category of professionals (GPs and residents), using pairwise tests to take account of repeated responses across the same respondents. We used the paired Student's t-test or the non-parametric Wilcoxon rank-sum test for continuous variables and the McNemar's test or the Fisher's exact test (expected numbers were less than 5) for categorical variables. To take account of the risk of alpha inflation induced by these three pairwise comparisons, we adjusted the threshold for the P-value using the Bonferroni correction (0.05/3). A P-value of 0.0167 was then considered statistically significant for these matched comparisons.

The distributions of scores and categorical variables between GPs and residents were not compared statistically.

### Ethics

Under the provisions of French Jardé law, this study evaluating professional practices did not require approval by the committee to protect persons.

**Table 2.** Management experiences according to substance by teaching GPs and residents.

	Teaching GPs (n = 238)				Residents (n = 327)			
	Tobacco % (n)	Alcohol % (n)	Opioids % (n)	p Value <sup>a</sup>	Tobacco % (n)	Alcohol % (n)	Opioids % (n)	p Value <sup>a</sup>
Experience of cessation				1.0000 <sup>b</sup> 0.0001 <sup>c</sup> 0.0001 <sup>d</sup>				0.0061 <sup>b</sup> 0.3770 <sup>c</sup> 0.1098 <sup>d</sup>
At least one experience of management	99 (236)	99 (236)	92 (218)		82 (269)	75 (244)	80 (261)	
Never managed any patient	1 (2)	1 (2)	8 (20)		18 (58)	25 (83)	20 (66)	
Practices according to cessation management				0.0001 <sup>b</sup> 0.0001 <sup>c</sup> 0.0001 <sup>d</sup>				0.0001 <sup>b</sup> 0.0001 <sup>c</sup> 0.0001 <sup>d</sup>
Single-handed management	78 (186)	17 (41)	15 (36)		74 (242)	11 (36)	8 (25)	
Management in collaboration with another structure	20 (48)	80 (189)	59 (140)		18 (58)	74 (243)	66 (216)	
Not usually managed any patient	2 (4)	3 (8)	26 (62)		8 (27)	15 (48)	26 (86)	

<sup>a</sup>pairwise comparisons using the McNemar's test or the Fisher's exact test, with adjusted threshold for the p-value after Bonferroni correction: 0.0167.

<sup>b</sup>p-value associated with pairwise comparisons tobacco vs. alcohol.

<sup>c</sup>p-value associated with pairwise comparisons tobacco vs. opioids.

<sup>d</sup>p-value associated with pairwise comparisons alcohol vs. opioids.

## Results

### Population characteristics

Of the 2,616 teaching GPs who received the questionnaire, 326 responded; 238 (9%) questionnaires were analysed (81 incomplete questionnaires and seven from practitioners who were not teaching GPs were excluded). The mean age of the teaching GPs was 50 years (Standard Deviation (SD): 9.9), and 58% were men. Of the 2,134 residents who received the questionnaires, 421 responded; 327 questionnaires (15%) were analysed (94 incomplete questionnaires were excluded). The residents' mean age was 28 years (SD 3.5), and 67% were women. Among the 13 regions in France, seven were represented at least once.

### Perceptions

Data on perceptions are reported in Table 1. For teaching GPs, the patient's responsibility was considered greater for tobacco than for alcohol ( $p < 0.0001$ ) and opioids ( $p < 0.0002$ ), with no difference between alcohol and opioids ( $p < 0.9722$ ). For residents, the patient's responsibility was also considered greater for tobacco than for alcohol ( $p < 0.0001$ ) and opioids ( $p < .0001$ ), with no difference between alcohol and opioids ( $p < 0.8557$ ).

Teaching GPs and residents found it easier to approach patients on the question of tobacco than of alcohol consumption ( $p < 0.0001$ ) and, in particular, easier for tobacco ( $p < 0.0001$ ) and for alcohol ( $p < 0.0001$ ) than for opioids.

On average, teaching GPs felt capable of managing tobacco (mean score (SD): 77 (19)), fairly capable of handling alcohol (mean score (SD): 60 (24)) and not very capable of managing opioids (mean score (SD): 42 (30)). Residents had a lower evaluation of their

abilities (mean (SD) score: 65 (22), 46 (22) and 33 (23) for tobacco, alcohol and opioids, respectively). Pairwise comparisons between substances were significant in both groups of respondents: they felt more capable of managing patients for tobacco than of alcohol ( $p < 0.0001$ ), more capable for alcohol than for opioids ( $p < 0.0001$ ), and more capable for tobacco than for opioids ( $p < 0.0001$ ).

### Professional responsibility

Teaching GPs and residents both considered their responsibility to discuss substance use, with mean scores globally over 80 for all substances, and over 90 for tobacco. In both groups, this role seemed more important for tobacco than for alcohol ( $p < 0.0001$ ), more important for alcohol than for opioids ( $p < 0.0001$ ), and more important for tobacco than for opioids ( $p < 0.0001$ ).

### Management experience

Of the teaching GPs, more than 90% stated that they had already managed one or several cessation treatments for tobacco, alcohol or opioids (Table 2). Of the residents, at least 75% stated that they had already managed one or several cessation treatments for tobacco, alcohol or opioids.

Teaching GPs have no more experience of management for tobacco than for alcohol, but significantly more experience for alcohol (99% vs. 92%,  $p < 0.0001$ ) and for tobacco (99% vs. 92%,  $p < 0.0001$ ) than for opioids. In contrast, residents had significantly more experience of management for tobacco than for alcohol (82% vs. 75%,  $p < 0.0061$ ), with no significant difference between alcohol and opioids and between tobacco and opioids.

Tobacco cessation was managed independently (without collaboration with other experts) in 78% of the case for teaching GPs (74% for residents). In contrast, alcohol cessation treatments were carried out in collaboration between the GP and another structure for 80% of teaching GPs (74% of residents). In total, 26% of teaching GPs and 26% of the residents stated that they did not usually undertake opioid detoxification (Table 2). Distribution differences of practices according to cessation management were significantly different for all pairwise comparisons between substances and in both groups of respondents.

## Discussion

### Main findings

Overall, patients are considered as 50% responsible for their SUDs, with a patient's responsibility greater for tobacco than for alcohol and opioids. Nevertheless, physicians considered it their responsibility to discuss tobacco, alcohol or opioids. Whereas they found discussing tobacco relatively easy, it was much harder for them to discuss alcohol and opioids. They felt capable of managing tobacco cessation but less capable of alcohol cessation and felt not very capable of handling opioid detoxification. Teaching GPs and final-year residents did not seem to differ much in their perception regarding SUDs.

### Strengths and limitations

This is the first study in more than 10 years to be carried out to analyse the perceptions, professional responsibility and management experiences of GPs. The study is limited by sampling bias due to the low response rate. This could have been improved by sending more reminders or by sending postal questionnaires [5].

The selection of teaching GPs must be discussed regarding representativity, even if a study has shown that teaching GPs and their patients are globally representative of French GPs [6]. Data were collected in 2017 but are of particular interest in 2021 due to scarce published data in the area. We do not expect that the representations and other outcomes investigated would have significantly changed in the study population during a 4-year period.

In this study, we have focussed on three substances only and we acknowledge that the field of addictive substances is far larger but the substances investigated are the most common and account for the majority of cases managed in general practice.

### Comparison of our findings with published data

High professional responsibility scores and easiness of managing tobacco users are concordant with international and French data [7, 8]. In 2009, 61% of French GPs declared that they did not manage patients with opioids use disorder [3]. Compared with only 26% in our study, we could consider our results to be an improvement. Nevertheless, reimbursement data have shown that a stable proportion of GPs (around 58%) prescribed opioid maintenance treatment between 2009 and 2015 [9]. In our study, this proportion was similar for GPs and residents, suggesting that experience did not modify these patients' management.

Finally, there was little difference in the way GPs and residents viewed patients who used tobacco, alcohol or opiates and their role with these patients. This contrasted with their reported ability to talk about alcohol and opioids, and their actual management of these patients. This gap should be addressed by initial training, as the peer model could not be efficient here. In a previous study, we found that intensity of SUD teaching seems to help in reducing stigmatising attitudes [10]. For opioids specifically, promoting an interdisciplinary approach could involve GPs in the management of these patients.

## Conclusion

Our survey revealed that teaching GPs and residents may overestimate patients' responsibility in their SUD, by quoting them as 50% responsible for their trouble.

Many practitioners considered that it is their professional responsibility to manage patients with tobacco, alcohol or opioid use disorders, with little difference between substances. However, respondents found patients using opioids more challenging to deal with, with more difficulty approaching substance use, more feeling of incapability regarding their management and less experience of cessation. The gap between their perceived responsibility and competencies should be addressed by training and promoting collaborative care.

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## Disclosure statement

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