

# BMJ Open Access to care for people with alcohol use disorder in France: a mixed-method cross-sectional study protocol (ASIA)

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## ABSTRACT

**Introduction** Alcohol use disorder (AUD) is a major public health concern worldwide. In France, only 10% of people with AUD (PWAUD) receive medical care. General practitioners (GP) are one of the main entry points for AUD care. The present ongoing study, entitled ASIA (Access to Care and Indifference toward Alcohol, *Accès aux Soins et Indifférence à l'Alcool* in French), aims to improve knowledge about factors associated with access to care for AUD by exploring related GP and PWAUD practices, experiences and perceptions.

**Methods and analysis** The ASIA project is an ongoing cross-sectional multisite study based on a complementary mixed-method approach (quantitative and qualitative) using a convergent parallel design. The double-perspective design of the study will enable us to collect and compare data regarding both PWAUD and GP points of view. For the PWAUD quantitative study, 260 PWAUD will be interviewed using a telephone-based questionnaire. For the qualitative study, 36 PWAUD have already been interviewed. The GP quantitative study will include 100 GP in a 15 min survey. Fifteen GP have already participated in semistructured interviews for the qualitative study. Logistic regression will be used to identify predictors for access to care.

With respect to data analyses, qualitative interviews will be analysed using semantic analysis while quantitative logistic regression will be used for quantitative interviews. **Ethics and dissemination** This study was approved by the CNIL (French National Commission on Informatics and Liberties) (approval reference number: C16-10, date of approval: 17 July 2017), the CCTIRS (Advisory Committee on Information Processing in Material Research in the Field of Health) and the CEEI (Evaluation and Ethics Committee) (approval reference number: 16-312, date of approval: 8 July 2016) of INSERM (French National Institute of Health and Medical Research). Results from ASIA will be disseminated in peer-reviewed publications, conference presentations, reports and in a PhD thesis.

## INTRODUCTION

Alcohol use disorder (AUD) is a major health and social concern and is responsible for approximately 3.3 million deaths (or 5.9% of all global deaths) annually.<sup>1</sup> It is estimated

## Strengths and limitations of this study

- The originality of this study is that it cross-analyses general practitioner (GP) and people with alcohol use disorder (PWAUD) data regarding a common issue. Its results will be very useful for improving AUD management in primary care and, consequently, for improving access to care for PWAUD in general.
- The major strength of this study is its mixed use of qualitative and quantitative data, which enables us to collect subjective data—such as perceptions—as well as data on measurable variables, both elements being involved in the patient's AUD care trajectory.
- Another strength is the recruitment of both PWAUD involved and PWAUD not involved in AUD care, so that barriers as well as levers to access to care can be identified.
- The study population with AUD enrolled in the study may not be completely representative of the general population with AUD in France, and data may need appropriate weighting during analysis.

that AUD contributes to over 200 diseases and injury conditions, especially liver cirrhosis and cancer.<sup>1</sup> The prevalence of alcohol dependence in Europe has been evaluated at 6.4% among men and 1.2% among women.<sup>2</sup> Only 10% of people concerned by AUD receive medical care for AUD in France.<sup>3</sup>

According to a report on alcohol use, published by the French Observatory on Drugs and Drug Addiction (OFDT) in 2014,<sup>4 5</sup> 10% of people interviewed in the country (n=15 635) reported daily alcohol consumption. A report published in 2015<sup>6</sup> estimated the annual external cost of alcohol abuse at €114,399 billion, in terms of lost lives, reduced quality of life and production losses.

In France, it is difficult to obtain accurate figures on care for AUD due to the different AUD management entry points<sup>7</sup> (specialised centres, general practitioners (GP), hospitals,

associations), but the proportion of people with AUD (PWAUD) linked to medical care for this disorder is definitely small.<sup>8</sup>

Although medical care for substance use disorders is easily accessible in Care, Prevention, and Support Centre for Addiction (CSAPA), GP constitute the main first line of care for AUD screening. Primary healthcare provided by GP is the first-choice option for preventing, screening and managing AUD and its consequences. Indeed, in addition to being the first point of contact, GP are numerous and provide comprehensive and coordinated care.<sup>9 10</sup>

Depending on the severity of the disorder, different psychosocial approaches can be used to help PWAUD reduce or stop alcohol, including motivational interviews, mindfulness interventions, social skills training and behavioural self-control training.<sup>11</sup> In addition, five different pharmacological treatments can be prescribed: acamprostate, disulfiram, naltrexone, nalmefene and baclofen.<sup>12</sup> Acamprostate and disulfiram are prescribed to help maintain abstinence in people who have already stopped drinking. Naltrexone is approved for abstinence maintenance, but has also been used off-label to reduce consumption.<sup>13</sup> Nalmefene is prescribed to reduce consumption as it reduces craving. Baclofen is also used to reduce craving, but unlike the other four drugs, which are legally available in France, it can only be prescribed off-label, as part of France's regulatory drug evaluation framework (called 'Temporary Recommendation Use (TRU)'). A review published in 2016 concluded that all five treatments show different safety profiles and must be adapted to each patient's alcohol consumption goal and individual profile.<sup>14</sup> Another review reported that all five treatments are still underused and that barriers to their prescription need to be investigated.<sup>15</sup>

It is important to note that we are in a transitional period between one paradigm and another. More specifically, alcohol-related risk reduction, including controlled drinking (CD), is becoming an acceptable therapeutic goal for caregivers and patients<sup>16</sup>; until very recently, the standard of care for AUD was based on stopping consumption, maintaining abstinence, preventing chronic complications related to excessive alcohol consumption and managing withdrawal symptoms. The licensing of nalmefene and the prescription of baclofen within France's TRU framework confirm this paradigm shift.<sup>17</sup> For many patients who might not be immediately ready for total abstinence, reducing consumption may constitute a realistic achievable goal.<sup>18</sup>

Lack of awareness of having AUD and apprehension towards total alcohol abstinence are two important barriers to treatment seeking.<sup>19</sup> It is possible that a lack of knowledge about the different AUD therapeutic options currently available<sup>20</sup> also constitutes a barrier.

Given this dynamic context, an in-depth evaluation of access to care for PWAUD in France would seem necessary. The present study, *Accès aux Soins et Indifférence à l'Alcool* (ASIA), aims to improve knowledge about factors

associated with seeking, receiving and providing care for AUD by exploring related GP and PWAUD practices, experiences and perceptions.

### General study design

ASIA is an ongoing multisite cross-sectional study which started in France in 2016. It aims to explore barriers to and facilitators of access to care for PWAUD in France, and to provide a better understanding of the individual and contextual factors associated with the currently poor level of access to care for those who wish to stop or reduce their alcohol consumption. The study uses a mixed approach which comprises (1) a qualitative study and (2) a quantitative study for two populations: PWAUD (1) and GP (2).

The complementary mixed-method approach (quantitative and qualitative) implemented here uses a convergent parallel design.<sup>21</sup> This type of study design provides a more comprehensive view of a phenomenon, as it separately cross-analyses data collected concomitantly using these two study approaches from each of two different studies (in our situation PWAUD and GP). For the present work, comparing data from the resulting four substudies will shed greater light on the mechanisms leading or not to AUD care.

## METHODS AND ANALYSIS

### Objectives

The specific objectives of the study are presented below. Relationship between project objectives and study components are resumed in [table 1](#).

1. Identify sociodemographic characteristics and health experiences associated with access to care (PWAUD).
2. Determine sociodemographic and professional characteristics associated with AUD management and screening, acceptance of CD and AUD pharmacological treatment prescription (GP).
3. Assess whether barriers found in other studies were relevant in the current French context (PWAUD and GP).
4. Identify other barriers and levers which could have been missed in the quantitative study (GP and PWAUD).
5. Illustrate and examine in depth the findings of the quantitative study (GP and PWAUD).

### Definition of AUD

The main tool used by the WHO to measure alcohol consumption is the Alcohol Use Disorders Identification Test (AUDIT).<sup>22</sup> This 10-item questionnaire provides an alcohol consumption score from 0 to 40. Scores between 8 (7 for women) and 15 suggest hazardous alcohol consumption, 16 and 19 harmful alcohol consumption and >20 alcohol dependence.<sup>15</sup> We chose to include only people with a score >15, because above this, medical care is recommended.<sup>11</sup>

**Table 1** Relationship between project objectives and study components

	PWAUD qualitative study	PWAUD quantitative study	GP qualitative study	GP quantitative study
(1) Identify sociodemographic characteristics and health experiences associated with access to care (PWAUD).		X		
(2) Determine sociodemographic and professional characteristics associated with AUD management and screening, acceptance of CD and pharmacological treatment prescription (GP).				X
(3) Assess whether barriers found in other studies were relevant in the current French context (PWAUD and GP).		X		X
(4) Identify other barriers and levers which could have been missed in the quantitative study (GP and PWAUD).	X		X	
(5) Illustrate and examine in depth the findings of the quantitative study (GP and PWAUD).	X		X	

AUD, alcohol used isorder; CD, controlled drinking; GP, general practitioner; PWAUD, people with alcohol used isorder.

### Definition of care

In this study, we decided to define ‘receiving care’ as follows:

- ▶ Receiving non-pharmacological therapeutic interventions from a healthcare professional to reduce or stop alcohol consumption and/or
- ▶ Participating in an alcohol-related support group (such as Alcoholics Anonymous) and/or:
- ▶ Taking one of the five approved AUD pharmacological drugs

### Patient and public involvement statement

Neither patients nor the general public were involved in the design of this study.

In order to respect patient confidentiality, we will not keep participants' contact information. Consequently, the results of the study will not be personally disseminated to participants. Participants are informed in the consent form that if they wish, they can contact the main investigator to obtain the study results.

### Sampling strategy and data collection

As of May 2018, data collection for the qualitative substudies has already been performed for the PWAUD and GP. Analysis of qualitative GP data has also been completed. More in-depth details can be found in this section.

#### PWAUD population

##### Inclusion criteria

For both substudies (ie, quantitative and qualitative), the following inclusion criteria are used: aged over 18, French speaking and AUDIT score >15.

#### Qualitative substudy

##### Recruitment and data collection

From June 2016 to May 2017, 36 patients were recruited in four medical services: the Saint-Barnabe substance

disorder clinic in Marseille, two CSAPA (Care, Prevention, and Support Centre for Addiction) in Avignon and Nîmes and the CISIH (Information and Care Centre for Human Immunodeficiency) in Saint-Marguerite Hospital in Marseille (patients recruited through this service were not already receiving AUD care at enrolment). Medical staff informed their patients of the study and introduced potential participants to the study investigator.

After providing information about the study, the study investigator performed a face-to-face interview in a closed office to ensure confidentiality. The interview was semistructured and conducted according to the guide described in [table 2](#).

Interviews lasted between 30 and 75 min and were recorded. Recordings were transcribed using word processing software. Transcripts of interviews were not returned to PWAUD participants for comments or correction. Only the qualitative substudy investigator has access to these records. Information concerning participants' confidentiality and anonymity is presented in the Ethics and Dissemination section.

### Data analysis

The qualitative data for the PWAUD interview corpus has yet to be analysed (as of June 2018). The text analysis software Iramuteq (Interface de R pour les Analyses Multidimensionnelles de Textes et de Questionnaires) (V.0.7 Alpha 2) will be used. Iramuteq provides different processing and statistical analysis options for produced texts and ensures accurate analyses for qualitative health research.

Descending hierarchical classification will be performed, whereby calculations are performed on the concurrence of words in the text.<sup>23</sup> The results come in the form of speech classes that are statistically over-represented in the segments gathered in the classes. Each of the lexical classes is described in detail by the lexicon that defines it, the characteristic segments that represent it, and the associated variables.<sup>24</sup>

**Table 2** Semistructured PWAUD interview guide

Qualitative substudy for PWAUD	
Standard data collected	Audit score Enrolment site Year of birth Gender Personal situation (eg, living in a couple, having children, etc) Professional situation (eg, employment status) Substance use (Yes/No, and if applicable, consumption frequency)
Semistructured PWAUD interview guide	
Opening question	You are experiencing difficulties with your alcohol consumption. I imagine it is difficult to deal with that. Could you tell me about your experience with alcohol since you started drinking, including, if applicable, your experience with health professionals for this specific problem?
If the interviewee does not mention these topics spontaneously, the interviewer must do so.	<ul style="list-style-type: none"> <li>▶ How long have you been drinking, how did it start?</li> <li>▶ How did you realise that you had a drinking problem?</li> <li>▶ Who have you talked to about your drinking problem?</li> <li>▶ Have you talked about it with your family physician or another physician?</li> <li>▶ What do you think prevents you from reducing or stopping your alcohol consumption?</li> <li>▶ What are your goals: to stop drinking altogether? To drink less?</li> <li>▶ What steps have you taken to try to change your consumption? (treatment, consultation with specialists, alternative medicines, etc)</li> <li>▶ Have you ever taken medication to stop drinking? Which medication(s) precisely?</li> <li>▶ Have you looked for information concerning treatments to stop or reduce alcohol consumption?</li> <li>▶ Have you heard of baclofen? Of nalmefene?</li> <li>▶ Do you visit medical websites and/or online forums? Does this help you? How?</li> </ul>

PWAUD, people with alcohol used isorder.

Iramuteq descending hierarchical classification includes five stages:

1. The full corpus is divided into text segments composed of 40 words (by default).
2. Lemmatisation: grouping of the inflected forms of a word so they can be analysed as a single item (verbs in the infinitive, nouns in the singular and adjectives in the masculine singular) (Unlike English, the French language has masculine and feminine endings for adjectives).
3. Definition of a contingency table of 'analysable' reduced forms and text segments.
4. Top-down hierarchical classification analysis: performed to obtain stable classes and significant associated words (tested by  $\chi^2$ ).
5. Production of class description to enable interpretation.

#### Quantitative substudy

##### Recruitment and data collection

Recruitment started in September 2017 and is ongoing (as of June 2018). PWAUD are recruited in several different medical services such as CSAPA, clinics, hospitals, addiction care services and ELSA (translated from French as 'Team for Linkage to Addiction Care', ELSA is an organisation of trained addiction care professionals, created in 2000 to increase screening and care for patients with AUD in hospitals. Patients recruited through ELSA are not yet receiving AUD care at enrolment).

Medical staff inform their patients of the study and provide them with the consent form. They collect the

phone number of patients who agree to participate and provide related information to the investigators.

Participants are then contacted for a phone-based interview. Computer-assisted interviews are conducted by trained investigators and answers are collected using Sphinx software (V.I.Q 2).

Interviews follow a questionnaire based on the framework detailed in table 3. This questionnaire was built by exploring the literature on similar topics.

#### Statistical considerations

Collected variables considered to be potentially associated with access to care include sociodemographic factors, characteristics of family members (with AUD or not), drinking patterns, perceived stigma and perception about treatment for AUD (table 3).

In order to calculate the sample size, we want to over-represent those who have received care for AUD by a factor of 2 in order to compare possible 'care subgroups'. A sample size of 110 versus 55 will allow us to highlight a strength of association with an OR 2.77 between potential correlates and receiving care for AUD (alpha=5% and a Power=80%).

Data will be analysed with STATA (Stata Statistical Software: Release 14. College Station, Texas, USA: StataCorp LP). In order to control for possible recruitment biases, the sociodemographic characteristics of PWAUD will be compared between individuals recruited in the ASIA study and individuals in the French general population identified with AUD in the 2016 Health Barometer

**Table 3** PWAUD questionnaire

Section number	Main theme	Specific themes
1	General information	Age, gender, family situation, educational status, income, employment status, quality of housing, receiving ordinary healthcare, access to transportation, internet access.
2	Alcohol consumption	Craving level, health issues related to alcohol consumption, withdrawal symptoms, alcohol consumption perceptions
3	Substances use other than alcohol	Tobacco, opioids, benzodiazepines, cocaine, synthetic drugs
4	Experiences and perceptions related to alcohol consumption	Feelings, discrimination, drinking environment (place, peers)
5	AUD aims concerning personal alcohol consumption	(eg, abstinence, reduction, etc)
6	Care received	Having a regular GP, quality of relationship with regular GP, receiving/having received care (in the 3 years prior to enrolment), having already sought AUD care through regular GP or in general, and, if applicable, reasons for not having sought AUD care.
7	Methods used to stop or reduce alcohol consumption	Medical methods, alternative therapies, association support. For each method, participants are asked if it was/is helpful and if it is ongoing.
8/9	Pharmacological treatments	Pharmacological treatments: Question 8 is designed for PWAUD who have already had at least one experience with pharmacological treatment, while question 9 is for people who have never taken any pharmacological treatment. For each of the five prescribed pharmacological treatments for maintaining abstinence or reducing alcohol consumption, participants are asked (1) if they have heard of it (if applicable where/from whom), (2) if they have taken the treatment (if applicable, who prescribed it to them), (3) reasons for deciding to take or not to take this treatment, (4) the treatment's efficacy and (5) (if appropriate) their personal opinion about the causes for failure using this treatment.

AUD, alcohol used disorder; GP, general practitioner; PWAUD, people with alcohol use disorder.

Survey, which was conducted by the Health Prevention and Education National Institute (INPES). The results obtained will be used to decide if a weighting procedure is needed to make our data more representative of PWAUD living in France.

The main correlates of access to care for PWAUD, including potential barriers and levers, will be identified using univariate and multivariable logistic regression models, the outcome being 'Having access to care for AUD in the three previous years medical care for AUD (yes/no)'. In order to control for heterogeneity depending on the type of care accessed by PWAUD, the outcome will also be expressed as a categorical ordinal variable and multinomial logistic regression will be used. Possible missing data in the outcomes can be managed using selection models (such as the Heckman model).<sup>25</sup>

Sensitivity analyses will be performed on specific subgroups (eg, those never treated vs those receiving pharmacological treatment for AUD) to verify results' robustness.

### GP population

#### Inclusion criteria

For both substudies (ie, quantitative and qualitative), the following criteria are used: working as a GP and following at least three PWAUD in the 3 years prior to the interview (even if they did not consult for AUD).

### Qualitative study

#### Recruitment and data collection

From December 2016 to August 2017, 15 GP were recruited from a GP network. Recruitment took place using a 'snowball method' as follows: a member of the study's research team first provided the study investigator with the contact information for two GP, who were then contacted by email. Both agreed to participate. These first participants were then asked for two other colleagues' emails, so that they, too, could be invited, and so on. Information about the study and the consent form to be completed were sent to all GP by email.

Interviews took place in GP offices or were performed over the telephone and were recorded in both cases. The interviews were semistructured and conducted according to the guide described in [table 4](#).

### Data analysis

Data analysis has been completed. For the GP interview corpus (10 hours), a manual sequenced thematic analysis<sup>26</sup> was performed. To ensure the results' reliability, four transcribed interviews were randomly selected, read repeatedly, analysed, coded and then categorised separately by the main investigator and her supervisor. They then discussed their respective findings together to identify discourse themes. The main investigator then conducted the initial coding of all 15 transcribed

**Table 4** Semistructured GP interview guide

## Qualitative substudy among GP

Standard data collected	Year of birth Gender Beginning date of professional practice Workplace category (urban, rural or semirural)
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## Semistructured GP interview guide

Opening question	Can you tell me about your experience with patients with alcohol use disorder, especially how you handle them?
If the interviewee does not mention these topics spontaneously, the interviewer must do so:	<ul style="list-style-type: none"> <li>▶ Are you currently following patients with alcohol use disorder?</li> <li>▶ How do you screen for alcohol use disorder? Do you use a specific scale or test?</li> <li>▶ Do you treat patients by yourself for substance abuse or do you refer them to a colleague or a specialised centre?</li> <li>▶ Do you prescribe pharmacological treatments to help with the suppression/reduction of alcohol consumption? Which ones?</li> <li>▶ What motivates this choice of treatment?</li> <li>▶ Do you think it is possible to stop drinking without treatment?</li> <li>▶ Do you think that abstinence is the only possible answer for people who have a drinking problem?</li> <li>▶ Do you consider that reducing consumption is an acceptable therapeutic objective (with respect to abstinence)?</li> <li>▶ What do you think about baclofen and nalmefene?</li> </ul>

GP, general practitioner.

**Table 5** GP questionnaire

## GP questionnaire

Section number	Main theme	Specific themes
1	General information about GP and their practice	Gender, age, practice duration (years), number of regular patients, consultation duration, addictology training, participation in an addictology network, opioid maintenance treatment prescription, interest in addictology, tobacco cessation management.
2	Alcohol consumption screening: alcohol cessation/reduction management	Performs screening (yes or no, alone or with another healthcare professional and, if applicable, which category of professional), reason for not managing patient alcohol cessation, number of patients with AUD, prescribes blood analysis to screen for AUD (yes or no), AUD spontaneous assessment (if applicable, with which tool/scale), uses a brief intervention (yes or no), knowledge of specialised alcoholism network structures (for nine different structures, GP are asked if they know the structure and if they collaborate with it).
3	AUD management (if applicable)	AUD management motivations, treatment/orientation/advice provided, pharmacological treatment prescription (yes or no and, if applicable, the reason for not prescribing pharmacological treatment to stop or reduce alcohol consumption), prescription of one of the five pharmacological treatments indicated to stop or reduce alcohol consumption (for each treatment: treatment prescription intention, prescription motivation, treatment risk–benefit opinion, opinion about causes for treatment failure, opinion about causes for poor adherence and treatment cessation).
4	Opinion question	‘Do you think that abstinence is the only acceptable therapeutic goal for PWAUD? (Yes, no, I don’t know)’, and ‘Do you think that CD is a realistic therapeutic goal for PWAUD? (Yes, no, I don’t know)’.

interviews according to the previously identified themes. After preliminary analysis, the coding framework was discussed and approved by all the study group members. The main investigator then conducted the final coding.

**Quantitative substudy***Recruitment and data collection*

Recruitment started in May 2017 and is ongoing (as of May 2018). GP are recruited randomly from the French

professional phonebook. Inclusion criteria are the same as for the qualitative study. After receiving information on the study and providing consent, participants are contacted to perform the survey. Just as for the PWAUD quantitative study, computer-assisted interviews are conducted by trained investigators and answers are collected using Sphinx software (V.IQ2). Interviews follow a questionnaire based on the guide detailed in [table 5](#).

The questionnaire was built by exploring the literature on similar topics.

In order to calculate the sample size, we assumed a 50% prevalence of GP not providing AUD. In order to be able to identify an OR equal to 3.5 when comparing the risk of not providing care when being exposed or non-exposed to a potential correlate, with 80% power and a 0.05 alpha risk, we calculated that we need to recruit at least 46 GP who provide AUD care and 46 who do not. We rounded this total to 50 and 50 (100 GP in total).

### Statistical considerations

Outcomes and potential correlates (See [table 5](#))

The four following outcomes will be explored:

1. Systematic AUD screening ([table 5](#), Section 2)
2. AUD management ([table 5](#), Section 3)
3. Acceptance of CD as a therapeutic goal ([table 5](#), Section 4)
4. Prescription of pharmacological treatment ([table 5](#), Section 3)

Potential variables that will be considered for analysis include demographic and professional characteristics/practices, number of patients with AUD and perceived barriers to engaging patients in care for AUD (lack of training, patient's denial of AUD, lack of time, complexity of AUD patients' profile (ie, several concurrent psychological and physiological comorbidities)).

Percentages, median and IQR will be used to describe the characteristics of the study group. In order to identify correlates of the three outcomes, we will use logistic regression models.

Potential explanatory variables of all four outcomes are described in the questionnaire outlined in [table 5](#). Logistic regression models will be used to compute both crude and adjusted OR and their 95% CI in order to obtain an estimate of the strength of the association between each explanatory variable and each outcome.

Variables with a liberal p value <0.20 will be considered eligible for the multivariable models which will be built using a backward procedure based on the likelihood ratio test (p<0.05). Perceived barriers to AUD engagement in care will be eligible for the final multivariable model independently of the p value obtained in the bivariable analysis, due to the high risk of confounding.

All the analysis will be performed using STATA SE/12.1.

Identifying GP who are likely to prescribe treatment for AUD and those who are not may help target future interventions to improve screening and treatment for PWAUD.

### DISCUSSION

The originality of the present protocol lies in the use of the combination of a mixed-method and a 'double-perspective' design. Various studies exploring both healthcare providers' and patients' points of view have highlighted differences in expectations, priorities and perceptions of each of the two populations, and identified the need to

develop patient-centred care strategies.<sup>27–29</sup> We believe that our study will confirm these findings and bring to light some new concerns in the field of AUD care. The use of a qualitative and quantitative mixed-method approach is, in our opinion, very pertinent, as alcohol consumption is highly integrated into various sociocultural patterns and differs greatly from one context to another.<sup>30</sup> Qualitative study approaches are especially useful to increase sociocultural understanding.<sup>31</sup> The replication of this study would be of great value for several reasons: the use of the mixed-method approach permits an in-depth exploration of the different aspects of access to care in a specific context, and the double-perspective design leads to a greater understanding of the differences between the two populations' views and perceptions.

The use of two different qualitative analysis methods may seem questionable but can be justified by the difference between the volume of data for GP and for PWAUD. More specifically, as the PWAUD interview corpus was very large (35 hours), the use of a software-assisted thematic and lexical content analysis seemed an appropriate choice. As the GP qualitative data were less substantial, manual thematic analysis seemed more appropriate. Data obtained using these two methods can easily be compared and researchers aiming to reproduce this study have the choice of using one or both of these same methods to analyse qualitative data.

We believe results from ASIA will be of great use in the development of future recommendations and the updating of care guidelines for GP, an important element being clear information about AUD care networks. The ASIA study's results will be disseminated via peer-reviewed publications, conference presentations and in general public media.

### Ethics and dissemination

The confidentiality and anonymity of participant data will be guaranteed for both GP and PWAUD in every step of the study; no information will be kept which could result in participants being identified. Audio-recorded interviews will be transcribed and deleted within 3 months after recording. Only the main investigator will have access to the recordings. For both populations, participation in the quantitative and/or the qualitative substudy will only occur if written consent is given after the individual has been provided with a document explaining ASIA modalities and objectives.

This study was approved by the CNIL (French National Commission on Informatics and Liberties) (approval reference number: C16-10, date of approval: 17 July 2017), the CCTIRS (Advisory Committee on Information Processing in Material Research in the Field of Health) and the CEEI (Evaluation and Ethics Committee) (approval reference number: 16 – 312, date of approval: 8 July 2016) of INSERM (French National Institute of Health and Medical Research).

Results from ASIA will be disseminated at several levels: We plan to publish four articles in peer-reviewed

international scientific journals covering the fields of public health, general practice and substance use disorders. We also plan to present our significant results in national and international congresses and events for professionals working within the field of AUD and health prevention.

The ASIA project will result in a PhD thesis, which will be defended in 2019.

A short report presenting ASIA main results will be distributed in PWAUD recruitment sites for staff and patients.

By the end of 2019, a presentation of ASIA results will be performed at the MILDECA (French inter-ministerial mission for the fight against drugs and addictive behaviours), the French government organisation which coordinates actions related to campaign against addictive behaviours. It will enable the design of recommendations to raise the awareness of GP about the necessity of improving screening and care for alcohol use disorder in their routine practice.

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#### REFERENCES

1. WHO. *Global status report on alcohol and health 2014*, 2014.
2. WHO, 2014. Regional office for Europe, alcohol fact sheet, WHO, 2014. [http://www.euro.who.int/\\_\\_data/assets/pdf\\_file/0007/343744/2017-Alcohol-Fact-Sheet-FINAL.pdf?ua=1](http://www.euro.who.int/__data/assets/pdf_file/0007/343744/2017-Alcohol-Fact-Sheet-FINAL.pdf?ua=1) (cited 23 Aug 2017).
3. Alonso J, Angermeyer MC, Bernert S, *et al*. Use of mental health services in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatr Scand Suppl* 2004;420:47–54.
4. Observatoire Français des Drogues et des Toxicomanies, 2014. Synthèse thématique sur l'alcool, 2014. <https://www.ofdt.fr/produits-et-addictions/de-z/alcool/> (cited 23 Aug 2017).
5. Beck F, Richard J-B. La consommation d'alcool en France. *La Presse Médicale* 2014;43:1067–79.
6. Kopp P. Observatoire Français des Drogues et des Toxicomanies, 2015. Le coût social des drogues en France. <https://www.ofdt.fr/BDD/publications/docs/eisxpkv9.pdf> (cited 25 Aug 2017).
7. Observatoire Français des Drogues et des Toxicomanies, 2017. Drogues, chiffres clés, 7ème édition. <https://www.ofdt.fr/BDD/publications/docs/DCC2017.pdf> (cited 23 Aug 2017).
8. Inserm. Alcool et santé. <https://www.inserm.fr/thematiques/neurosciences-sciences-cognitives-neurologie-psychiatrie/dossiers-d-information/alcool-et-sante> (cited 25 Aug 2017).
9. Holmqvist M, Bendtsen P, Spak F, *et al*. Asking patients about their drinking. *Addict Behav* 2008;33:301–14.
10. lid TG, Nesvåg S, Meland E. When general practitioners talk about alcohol: exploring facilitating and hampering factors for pragmatic case finding. *Scand J Public Health* 2015;43:153–8.
11. Société Française d'alcoologie, 2014. Mésusage de l'alcool : dépistage, diagnostic et traitement. <https://www.sfalcoologie.asso.fr/download/RBP2014-SFA-Mesusage-AA.pdf>
12. Franck J, Jayaram-Lindström N. Pharmacotherapy for alcohol dependence: status of current treatments. *Curr Opin Neurobiol* 2013;23:692–9.
13. C. Garbutt J. Efficacy and tolerability of naltrexone in the management of alcohol dependence. *Curr Pharm Des* 2010;16:2091–7.
14. Sinclair JMA, Chambers SE, Shiles CJ, *et al*. Safety and tolerability of pharmacological treatment of alcohol dependence: comprehensive review of evidence. *Drug Saf* 2016;39:627–45.
15. Goh ET, Morgan MY. Review article: pharmacotherapy for alcohol dependence - the why, the what and the wherefore. *Aliment Pharmacol Ther* 2017;45:865–82.
16. Higuchi S, Saito T. Reduction in alcohol consumption: therapeutic goal in alcohol dependence treatment]. *Nihon Arukoru Yakubutsu Igakkai Zasshi. févr* 2013;48:17–31.
17. Paille F, Martini H. Nalmefene: a new approach to the treatment of alcohol dependence. *Subst Abuse Rehabil* 2014;5:87.
18. Rahlali N, Millier A, Briquet B, *et al*. Modelling the consequences of a reduction in alcohol consumption among patients with alcohol dependence based on real-life observational data. *BMC Public Health* 2015;15:1271.
19. Probst C, Manthey J, Martinez A, *et al*. Alcohol use disorder severity and reported reasons not to seek treatment: a cross-sectional study in European primary care practices. *Subst Abuse Treat Prev Policy* 2015;10:32.
20. Wallhed Finn S, Bakshi AS, Andréasson S. Alcohol consumption, dependence, and treatment barriers: perceptions among nontreatment seekers with alcohol dependence. *Subst Use Misuse* 2014;49:762–9.
21. Creswell J, Clark PV. *Designing and conducting mixed methods research*. 2 edn. Thousand Oaks: Sage Publications, 2011.
22. Bohn MJ, Babor TF, Kranzler HR. The Alcohol Use Disorders Identification Test (AUDIT): validation of a screening instrument for use in medical settings. *J Stud Alcohol* 1995;56:423–32.
23. Mazzone AC, Fiates GM. Perceptions and choices of Brazilian children as consumers of food products. *Appetite* 2014;78:179–84.
24. Marchand P, Ratinaud P. Entre distinctivité et acceptabilité. *Réseaux* 2017;204:71–95.
25. Protopoulos C, Raffi F, Roux P, *et al*. Factors associated with non-adherence to long-term highly active antiretroviral therapy: a 10 year follow-up analysis with correction for the bias induced by missing data. *J Antimicrob Chemother* 2009;64:599–606.
26. Paillé P, Mucchielli A. *L'analyse qualitative en sciences humaines et sociales*. Paris: Armand Colin, 2012:424.





27. Papastavrou E, Efstathiou G, Tsangari H, *et al.* Patients' decisional control over care: a cross-national comparison from both the patients' and nurses' points of view. *Scand J Caring Sci* 2016;30:26–36.
28. Demir YP, Balci NÇ, Ünlüer NÖ, *et al.* Three different points of view in stroke rehabilitation: patient, caregiver, and physiotherapist. *Top Stroke Rehabil* 2015;22:377–85.
29. Guix Oliver J, Fernández Ballart J, Sala Barbany J. Patients, physicians and nurses: three different points of view on the same issue. Attitudes to and perceptions of patient rights]. *Gac Sanit. dec* 2006;20:465–72.
30. Room R. Intoxication and bad behaviour: understanding cultural differences in the link. *Soc Sci Med* 2001;53:189–98.
31. Gergen KJ, Josselson R, Freeman M. The promises of qualitative inquiry. *Am Psychol* 2015;70:1–9.