

“Up To Date”

Use of psychoactive substances in adults: **P**revention and **T**reatment by general practitioners and **O**ccupational physicians; **D**ATa retri**E**val

Final report

Book 1

March 2015



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Context and objectives of the Up to Date programme

In Europe, demand has increased in recent years for the treatment of problematic consumption of psychoactive substances (illegal or not). Despite a diversified outpatient care offer, general practitioners (GPs) are seen as major players in detecting and managing problems related to substance abuse. Similarly, occupational physicians (OPs) are also expected to play a role in the field of substance abuse, as health and safety promoters in the workplace (collective bargaining convention Nr. 100).

There is a clear lack of scientific data concerning addiction management by these two actors. Little is known about resources and strategies used by these health professionals when they are faced with this issue, nor what their interest or attitude are in it.

The proposal of the UP TO DATE consortium aimed to provide an accurate view of the management of addiction in Belgium, from the physicians' perspective. Other professionals from the addiction sector will also be interviewed to assess if they consider these physicians as a support, and if the role played by GPs is sufficiently valued. This federal study will address this issue in both the French and Dutch-speaking regions.

The purpose of this research was to know 1) what the current demand is for care in the front line; 2) to what extent GPs and OPs are involved in this problem, and 3) what resources they are able to use to provide appropriate response to all types of requests for treatment of substance abuse.

Both qualitative and quantitative methods (mixed methods research) were used.

Precisions

Surveys for both professions were constructed limited to the adult patient population (18-65 years) for the sake of symmetry of investigations in general practice and occupational health. During the entire study, the focus was on alcohol, hypnotics and tranquilizers, and illegal drugs.

We refer to “problematic use” as defined by the Public Health Association of British Columbia: from “potentially harmful” to “substance use disorders” (figure 1).

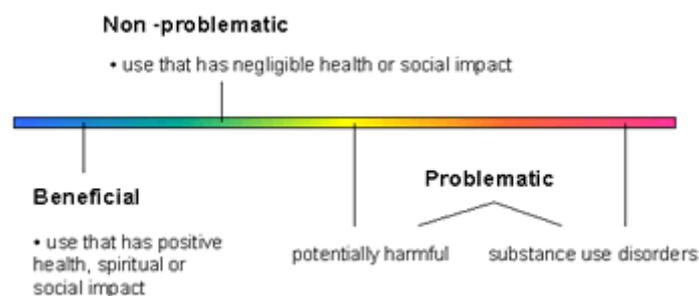


Figure 1 : Spectrum of psychoactive substance use

In addition, we use the following definitions throughout the document:

- In the workplace, consumption is problematic when it decreases the performance at work and/or the safety of the worker and his colleagues;
- In the general population, alcohol consumption is problematic when it exceeds the WHO's recommendations (three units a day for men and two for women);

- For hypnotics and tranquilizers, consumption is problematic if non prescribed or higher than the prescribed dosage;
- Finally, misuse or addiction to illegal drugs will be considered when support is asked at the patient/worker's request or by his/her entourage, by the physician or by a decision of justice.

Methods

The study was divided into seven work packages.

WP1: Literature review

A systematic literature review was conducted focusing on international guidelines about screening and interventions on substance abuse among GPs and OPs. We also looked for models for referral and collaboration between GPs, OPs, and specialized centres.

WP2: Substance abuse prevalence analysis in the first line

The UP TO DATE consortium collaborated with the Institute of Public Health (IPH). Data were collected in the general population during the first half of 2013 by the "Sentinel GPs' network". The content focused, on one hand on alcohol, illegal drugs, hypnotics and tranquilizers abuse, and, on the other hand, on the employment status.

WP3/4: Attitudes and experiences of GPs (WP3) and OPs (WP4) in daily practice regarding substance abuse, screening, prevention and management

These two WPs aim to describe the field context of attitudes and experience of GPs and OPs regarding alcohol, illegal drugs, hypnotics and tranquilizers abuse in various professional settings.

Qualitative part

A qualitative exploratory study was conducted, among GPs and Ops, according to a phenomenological approach, to understand their perspectives. The study focused both on physicians who manage substance abuse in daily practice (eventually within a network) as on those who don't or do little to retrieve the determining factors of the variety of behaviour.

In-depth interviews were held until data saturation on relevant themes. Similar approaches will be used for both GPs and OPs. The I-Change Model was used as a framework for building the interview guide and the thematic analysis.

GPs were recruited through the networks of Liege and Antwerp universities. The purposive sampling was done according to the following characteristics: gender, seniority, kind of practice (solo, group), urban/rural practice, substance abuse management or not.

OPs were recruited in a purposive sampling through the networks of Liege and Leuven universities, taking into account the company size and a real policy of alcohol and drug management (according to collective bargaining convention Nr. 100).

Quantitative part

To triangulate data from the qualitative study and/or to detect specific profiles, a quantitative questionnaire survey was conducted with a larger sample of GPs and OPs all over the country. The GP and OP samples ensured representativeness.

A questionnaire was constructed, taking again the I-Change Model as a framework to triangulate data consistency between the qualitative and the quantitative part of the survey.

WP5 Mirrored view

Are GPs and OPs reliable partners for other workers dealing with substance abuse? Do the latter want more collaborative work and how do they want to improve it?

The aim of this WP was an overall comprehensive approach on the existing collaboration (if any) between, on one hand, GPs and OPs, and on the other hand, with field associations, mental health institutions, employers and trade unions, consultants responsible for prevention and HRM in companies, the judicial and penal system (police, prosecutors, judges, probation officers, and prisons) from the latter's point of view. The wishes and needs for improvement were studied, as their level of priority.

Nominal groups

The nominal group technique allowed a qualitative analysis and a ranking among answers from participants to a single question.

Groups of professionals involved in substance abuse management at care, judicial or social level were organised in FR and NL regions to explore their point of view about collaboration with GPs and OPs and their wishes for improvement.

Professionals were interviewed in groups according to monodisciplinary nominal group technique. Professions that were interviewed were as follow: 1) psychiatrists, psychologists, social workers (the "health sector"); 2) employer's representatives, trade union representatives, internal prevention advisers and external prevention advisers (the "working sector"); and 3) persons from the judiciary and from youth protection services (the "judicial sector").

WP6: International comparison

Relevant experiences or programmes from abroad aiming at the improvement of GPs and/or OPs involvement in substance abuse management and that were evaluated were sought from Internet and grey literature. The patient's, the physician's and the public health's perspective were considered.

WP7: Valorisation

The last phase of this research was to submit its findings to GPs' and OPs' stakeholders (academics, members of scientific associations, medical trade unions), with the aim to help the integration into daily practice, taking into account the existing reality.

Large Scale Interventions methodology (LSI) was used. Workshops were organized, for GPs in local peer groups (GLEM/LOK), and for OPs separately. A common meeting for GPs and OPs stakeholders was held in Brussels, on January 23rd.

A seminar for Public health authorities and the steering committee was held to present the global results of this research (Brussels, April, 1st, 2015).

Evidence-based recommendations for
General practitioners and Occupational
physicians regarding detection,
management and collaboration for abuse
of alcohol, illicit drugs, tranquilizers and
sedatives in the Belgian working
population

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Summary

Background

In Belgium about 10% of men and 6% of women can be considered as problematic drinkers (1). The Health interview survey (HIS) 2008 data show that “ever” users (last 12 months) are 14% for cannabis and 4% for an illegal drug other than cannabis. Furthermore about 15% of the Belgian population had taken psychoactive medicines during the last two weeks mainly sleeping pills (9%), tranquilizing drugs (7%) and antidepressants (6%) (1). More women (20%) than men (10%) take psychoactive medication (1). Specifically for employed people international data evoke a major concern because of a high rate of drug use and associated risks regarding workplace safety and loss of productivity (2, 3). In Belgium the same trend is observed, with 13% of the working population suffering from problematic alcohol use (4). Data on other drug use are lacking, however the high use rate in the general adult population suggests a problematic use rate among working adults in particular.

A high rate of substance abuse in the working population requires effective management. General practitioners (GPs) and occupational physicians (OPs) can play a central role in detecting and managing substance abuse of employed people (5, 6). Little is known about resources and strategies used by these health professionals regarding detection, management and collaboration for abuse of alcohol, illicit drugs, tranquilizers and sedatives. In order to avoid more loss of productivity and stimulate a fast return to work, it is important to inform GPs and OPs about best practices for managing substance abuse in the working population. Inter-professional collaboration between GPs and OPs is indispensable to coordinate care, prevent contradictory advice, facilitate a quicker return to work, reintegration and shorten sick leave (7). This review reports the available evidence of addiction management in the literature and what is known regarding the most effective interventions for identification of users, to manage and to collaborate for best outcomes among working people with substance abuse.

Methodology

A systematic search of peer-reviewed guidelines was undertaken, regarding the most effective screening methods and management of substance abuse in practice, as well as recommendations for collaboration of GPs and OPs. We formulated nine clinical questions according to the PICO principles to guide our search process.

A detailed search for international high-quality guidelines was performed according to the ADAPTE approach (8). Guidelines were considered within their organizational and cultural context to ensure relevance for local practice. We retrieved guidelines, published between 2002 and 2012, using the databases Guidelines International Network (GIN) and US National Guidelines Clearinghouse (NGC). MeSH Terms from Medline were included in the search strings (see appendix 1 for an extensive list of MeSH Terms used in the search strategy). In addition, we screened several professional websites for practice guidelines. Inclusion and exclusion criteria were formulated for the selection of guidelines on title and abstract by two researchers. Eligible guidelines were considered with the adult working population aged from 18 until 65 years old. Guidelines in Dutch, English, French, German, and Spanish language were included. Furthermore guidelines intended for general practitioners and/or

occupational physicians were considered eligible and guidelines were excluded if the primary focus was not on illicit drugs, alcohol abuse and tranquilizers and sedatives (see appendix 2 for inclusion and exclusion criteria). Thirty-five guidelines were further appraised for their quality with Appraisal of Guidelines for Research and Education (AGREE) II instrument by two independent researchers (9). The scores of the two independent quality appraisal rounds were compared and a difference of more than 3 points for a category was revised. Finally the sum of the scores of the two reviewers was made and guidelines, scoring above 50% for the methodology, were included.

In a second stage, an additional search was performed in the databases Medline, The Cochrane Library and PsycINFO, using MeSH Terms, to retrieve evidence published after the last available guidelines (from January 2009-July 2012). A quality assessment was conducted using the SIGN checklist for systematic reviews (10).

Grades for the recommendations included in this report were originating from different grading systems. During an expert and stakeholder round, a final grade for each recommendation will be decided, based on the available evidence and expert consensus.

Results

The flow diagram of the results is presented in appendix 3. Twenty clinical practice guidelines were eligible for inclusion (see appendix 4). Additionally, evidence of 43 systematic reviews was added.

Although 'Occupational physician' was included as a search term in our search strings, no guidelines in regard to management of substance use by OPs were retrieved. Few recommendations on workplace alcohol testing and management were identified.

This report presents the recommendations for GPs and OPs (if relevant) to detect and manage substance abuse (figures 1-3).

Several recommendations are based on extensive evidence in various settings such as the use of the AUDIT in primary care settings for the detection of alcohol abuse, while other recommendations clearly lack evidence and originated from expert consensus meetings.

For instance there is a lack of studies evaluating the effectiveness of screening instruments to detect drugs misuse in general practice or occupational health settings.

Alcohol abuse among adult working population (18-65 years)

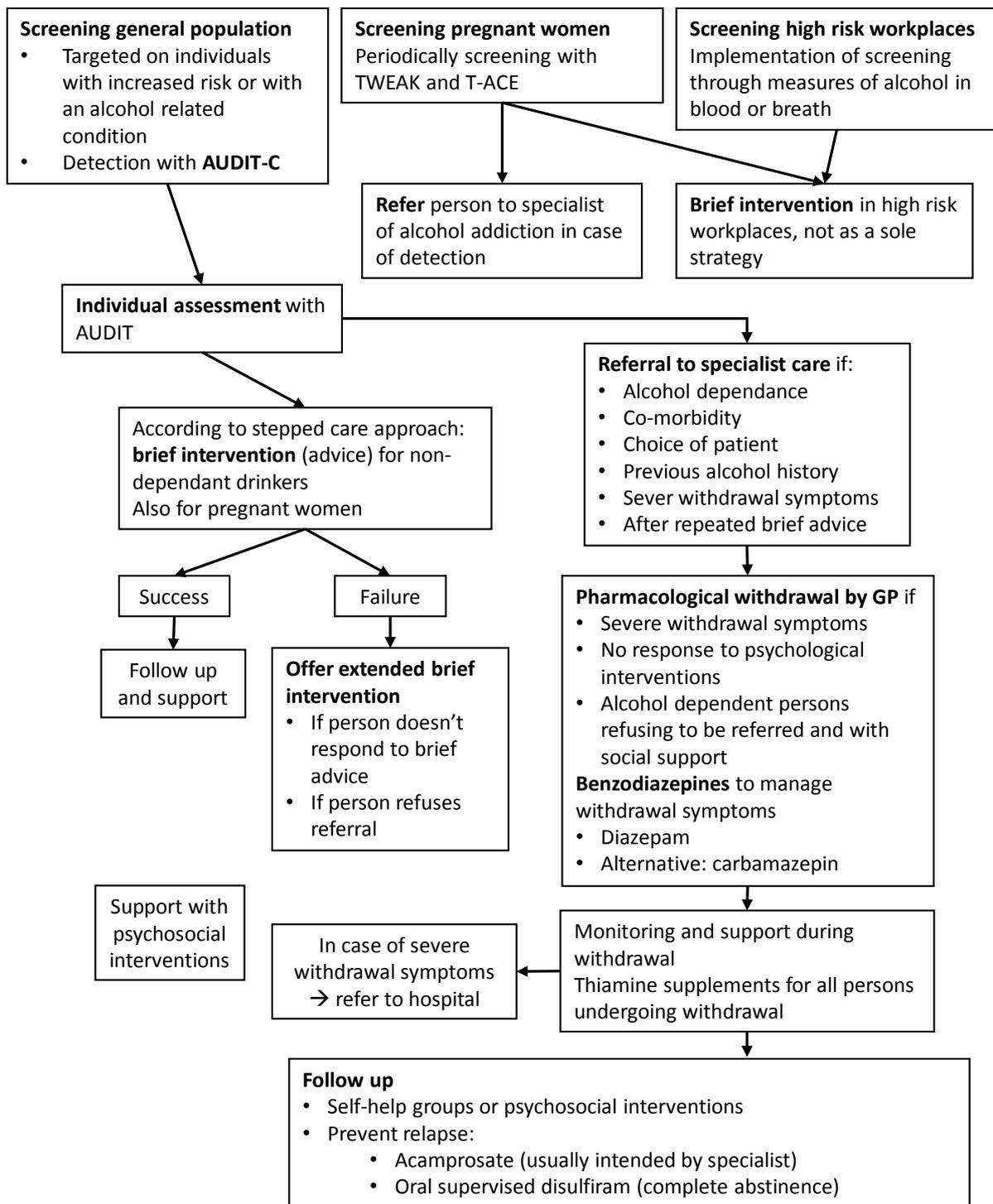


Figure 2

Abuse of tranquilizers and hypnotics among adult working population (18-65 years)

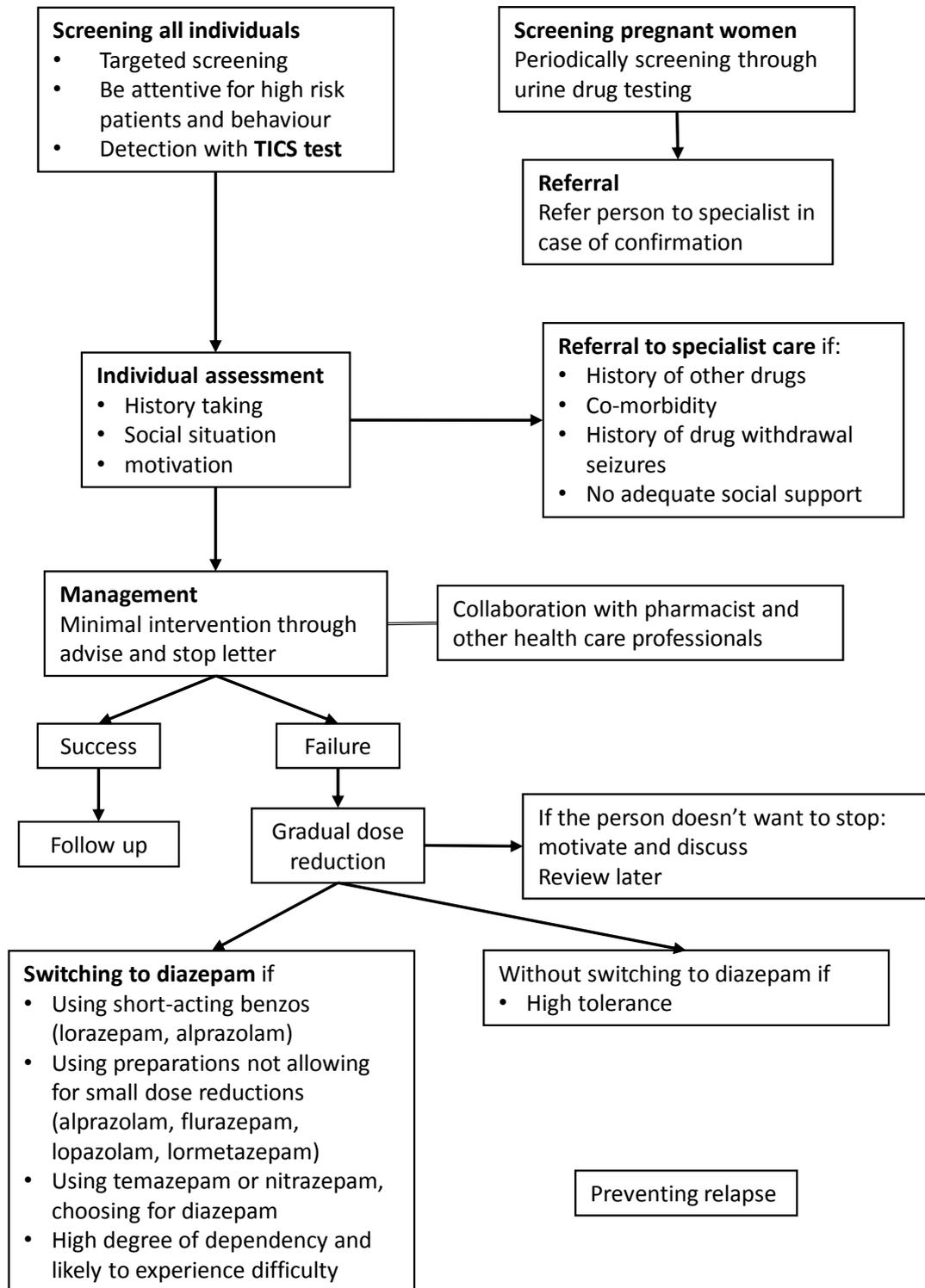


Figure 3

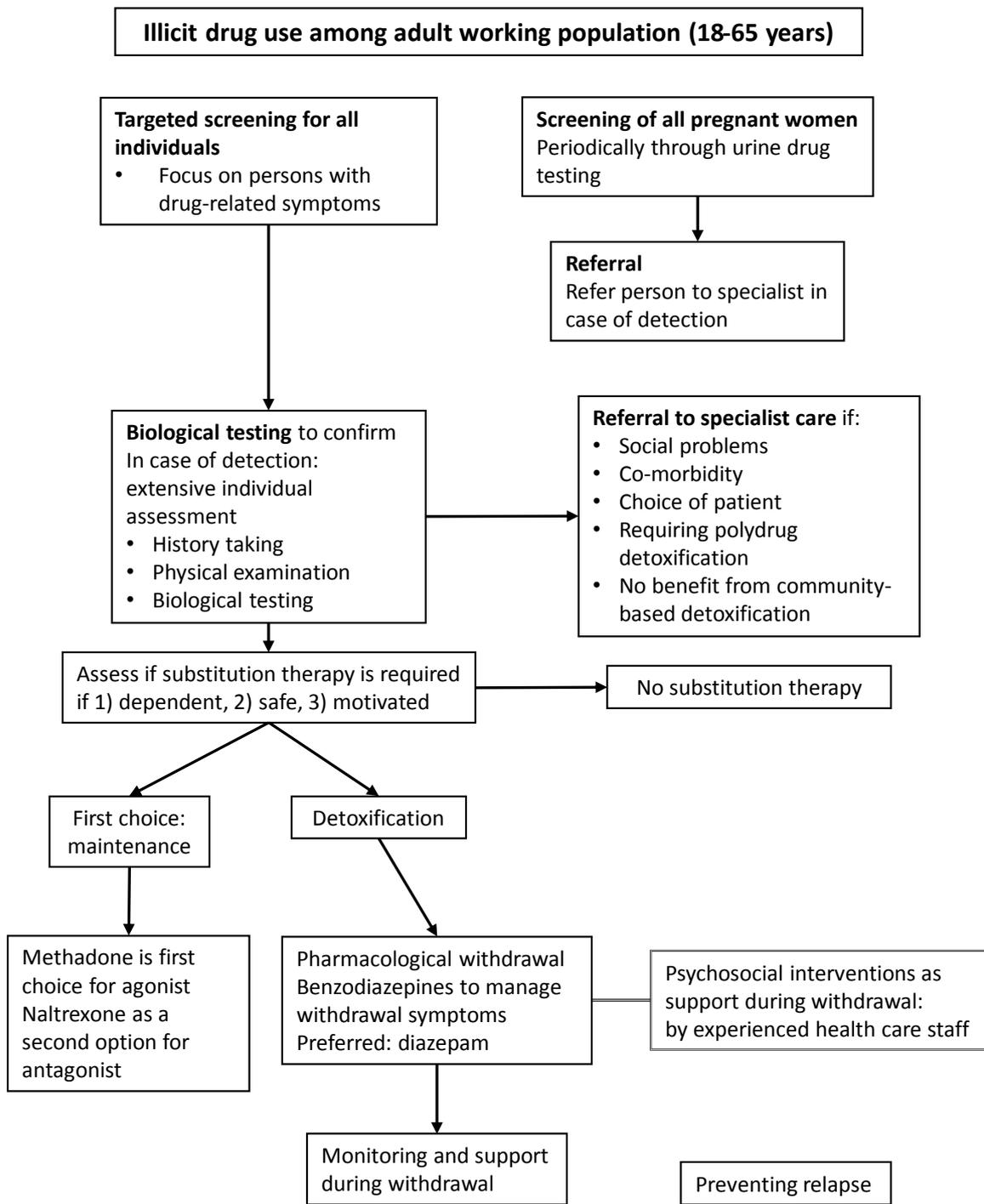


Figure 4

Discussion

In this study, we only searched for guidelines and systematic review studies, but no other levels of evidence or grey literature were considered. Despite the importance of the role of the OP in prevention programmes of substance abuse, the focus of this study was only on detection and management, which is a limitation.

To our knowledge, this study was the first to explore resources and strategies for collaboration between occupational health and primary care in substance abuse management. The review initiated from a very broad search strategy with multiple searches and therefore retrieved a large number of duplicates reducing the likelihood of missing relevant guidelines.

There is a paucity of evidence for the role of the occupational physician. The studies being conducted in the area of occupational health interventions and substance abuse lack methodological adequacy (11).

Furthermore this literature study indicates a lack of standards on collaboration in substance abuse management.

More high-quality studies on the role of workplace interventions and the OP, as well as best ways to achieve collaboration are recommended.

In addition the overall quality of the existing guidelines on substance abuse was poor, particularly in regard to the development methodology, the applicability and stakeholder involvement. This is a common observed problem in clinical practice guidelines (12). To avoid the inclusion of poor quality guidelines, a quality appraisal round was performed with the AGREE II instrument.

Conclusion

The next recommended steps are the formulation of a standard for occupational physicians in substance abuse management, as well as guidelines concerning the collaboration between GPs and OPs.

Further it is important to map perceptions, experiences and needs of OPs and GPs on the daily practice of substance abuse management.

Definitions

An alcohol problem is categorized as hazardous drinking, harmful drinking, and alcohol dependence depending on the level and pattern of alcohol consumption. This is based on the World Health Organization (WHO) International Statistical Classification of Diseases and Related Health Problems, tenth revision (ICD-10), categorization of alcohol-use disorders.

Hazardous drinking occurs when a person drinks over the recommended weekly limit of alcohol (21 units for men and 14 units for women).

Harmful drinking is defined in the International Classification of Diseases (ICD-10) as a pattern of drinking that causes damage to physical (eg to the liver) or mental health (eg episodes of depression

secondary to heavy consumption of alcohol). The diagnosis requires that actual damage should have been caused to the mental or physical health of the user.

Alcohol dependence describes a cluster of physiological, behavioural, and cognitive phenomena in which the use of alcohol takes on a much higher priority for a given individual than other behaviours that previously had greater value. A central characteristic is the desire (often strong, sometimes perceived as overpowering) to drink alcohol. Return to drinking after a period of abstinence is often associated with rapid reappearance of the features of the syndrome (priming).

Sources (13, 14)

The meanings of the terms 'opioid' and 'opiate' can be considered as largely synonymous, with opioid being used, as it has a broader definition. Sources (15, 16)

An **opioid** is either a natural derivative of opium (e.g. heroin) or a synthetic substance (e.g. methadone, buprenorphine) with agonist, partial agonist, or mixed agonist and antagonist activity at opioid receptors. An opioid antagonist is a drug that blocks the activity of a drug with agonist activity.

An **opiate** is either a natural derivative or a semi-synthetic constituent of opium.

Recommendations

In the following section, the recommendations are graded according to the international GRADE group classification. *“The grading scheme classifies recommendations as strong (Grade 1) or weak (Grade 2), according to the balance between benefits, risks, burden, and cost, and the degree of confidence in estimates of benefits, risks, and burden. The system classifies quality of evidence (as reflected in confidence in estimates of effects) as high (Grade A), moderate (Grade B), or low (Grade C) according to factors that include the risk of bias, precision of estimates, the consistency of the results, and the directness of the evidence”* (<http://www.uptodate.com/home/grading-guide>) (table 1).

Table 1 : Grading recommendations

Grade of Recommendation	Clarity of risk/benefit	Quality of supporting evidence	Implications
1A. Strong recommendation, high quality evidence	Benefits clearly outweigh risk and burdens, or vice versa.	Consistent evidence from well performed randomized, controlled trials or overwhelming evidence of some other form. Further research is unlikely to change our confidence in the estimate of benefit and risk.	Strong recommendations, can apply to most patients in most circumstances without reservation. Clinicians should follow a strong recommendation unless a clear and compelling rationale for an alternative approach is present.
1B. Strong recommendation,	Benefits clearly outweigh risk and burdens, or vice versa.	Evidence from randomized, controlled trials with important limitations (inconsistent results, methodologic flaws, indirect	Strong recommendation and applies to most patients. Clinicians should follow a strong recommendation unless a

moderate quality evidence		or imprecise), or very strong evidence of some other research design. Further research (if performed) is likely to have an impact on our confidence in the estimate of benefit and risk and may change the estimate.	clear and compelling rationale for an alternative approach is present.
1C. Strong recommendation, low quality evidence	Benefits appear to outweigh risk and burdens, or vice versa.	Evidence from observational studies, unsystematic clinical experience, or from randomized, controlled trials with serious flaws. Any estimate of effect is uncertain.	Strong recommendation, and applies to most patients. Some of the evidence base supporting the recommendation is, however, of low quality.
2A. Weak recommendation, high quality evidence	Benefits closely balanced with risks and burdens.	Consistent evidence from well performed randomized, controlled trials or overwhelming evidence of some other form. Further research is unlikely to change our confidence in the estimate of benefit and risk.	Weak recommendation, best action may differ depending on circumstances or patients or societal values.
2B. Weak recommendation, moderate quality evidence	Benefits closely balanced with risks and burdens, some uncertainty in the estimates of benefits, risks and burdens.	Evidence from randomized, controlled trials with important limitations (inconsistent results, methodologic flaws, indirect or imprecise), or very strong evidence of some other research design. Further research (if performed) is likely to have an impact on our confidence in the estimate of benefit and risk and may change the estimate.	Weak recommendation, alternative approaches likely to be better for some patients under some circumstances.
2C. Weak recommendation, low quality evidence	Uncertainty in the estimates of benefits, risks, and burdens; benefits may be closely balanced with risks and burdens.	Evidence from observational studies, unsystematic clinical experience, or from randomized, controlled trials with serious flaws. Any estimate of effect is uncertain.	Very weak recommendation; other alternatives may be equally reasonable.

Clinical question 1: What are the most effective methods for GPs and OPs to detect alcohol abuse among adult patients?

Who should be screened for alcohol abuse?

Recommendations

In primary care, population-based screening is not feasible. The focus should be on persons with increased risk of harm from alcohol or who have an alcohol-related condition. Targeted screening is recommended in case of direct (e.g. alcohol smell) or indirect signs (e.g. sleep problems, anxiety), indicating problematic alcohol use. **Grade 2C**

Universal screening for alcohol consumption should be done periodically for all pregnant women and women of childbearing age. Ideally, at-risk drinking could be identified before pregnancy, allowing for change. **Grade 1B**

Screening for alcohol consumption that causes risk at workplaces and appropriate intervention systems should be widely implemented in high-risk workplaces. **Grade 2C**

Information for practice

a) For primary care professionals

No specific symptoms or complaints indicate with certainty problematic alcohol use. Problematic alcohol use may be indicated by direct signs (alcohol smell, alcohol intoxication), people from the environment reporting alcohol use or by indirect signs (psychological, social and/or physical signs) (17) (18) (19) (6)

Primary care physicians must be alert for the following indirect signs (6, 13, 17-19):

Social Problems: relational problems; domestic violence or abuse; unsafe sex; criminal activities; financial problems; job problems such as repeated absenteeism, impaired work performance and accidents, poor employment record

Psychological problems: amnesia, memory loss or dementia; morbid; mood disorders (e.g. depression, fear); alcoholic hallucinations; self-harm; anxiety and panic disorders

Physical problems: multiple acute presentations to A&E with trauma and head injury; general (fatigue, malaise, hyperventilation, extreme transpiration, weight change, foetor alcoholicus); gastrointestinal (reflux, gastritis, ulcer, liver disorders, palpitations, malabsorption, pancreatic); heart/lungs (hypertension, cardiomyopathy, lung infections, heart rhythm disturbances); nerve system (headache, tremor, peripheral neuropathy, muscle pain, hyperreflexia, insults/epilepsy, black-outs); skin (edemateous face, spider naevi and erythematous,...); sexual problems, regularly attending Genito-urinary Medicine (GUM) clinics, repeatedly seek emergency contraception or unexplained infertility; gout; fractures.

Other signs: frequent use and asking for tranquilizers and hypnotics; many consultations, regularly injuries, excessive use of nicotine.

Increased lab values of for instance MCV or gamma-GT or ASAT (SGOT) and ALAT (SGPT) or uric acid.

Other occasions to detect alcohol abuse:

- During a preventive health exam
- When registering new patients
- Follow up of severe medical problems (arterial hypertension, diabetes, obesity...)

b) Specifically for occupational physicians

Evidence is ambiguous for workplace testing. In general screening for alcohol consumption that causes risk at workplaces is recommended to be widely implemented in high-risk workplaces (21). But in particular for occupational drivers there is insufficient evidence to advise for or against alcohol testing in the workplace setting (22).

High rates of problem drinking in some workplace settings suggest it is a suitable venue for detection of risky drinking. Detection of unsafe alcohol consumption should be part of any routine health evaluation in the workplace. Workplace occupational health and safety procedures can identify appropriate strategies and referral options for those workers identified as having alcohol-related problems (21).

Young male drinkers, who are less likely to attend primary care settings, may be screened in the workplace. Alcohol may also be detected through occupational breath test screening; in which case, the individual should be offered referral for assessment by a clinician with expertise in diagnosis and management of alcohol use disorders (21).

Evidence

Because of their role in primary health care and their high rate of contact with the general public, general practitioners are ideally placed to detect and offer patients help with drug and alcohol problems (21). Australian evidence shows that screening and early intervention in primary care settings is cost-effective (21).

Ideally, alcohol screening should be carried out routinely as an integral part of clinical practice. However, NICE has recognized that this is not always feasible or practical, and has listed groups considered to be at increased risk of alcohol problems (based on observational studies and expert opinion) (18).

Based on the review of National Treatment Agency for Substance Misuse (NTA) and the guidelines of Clinical Knowledge Summaries (CKS), a targeted screening is recommended (14, 23). Systematic screening means a high workload for the GP, due to time constraints, and the patient will be distracted from the initial contact reason.

At an NNT (Number Needed to Treat) of eight, 1000 patients would need to be screened for around six patients to show clear benefit. For this reason, primary care professionals should rely on case detection based on clinical presentation, with judicious use of questionnaire tools where there is suspicion, rather than the screening of whole populations (13). The list of signs is based on consensus and on guidelines such as SIGN and NHG (17).

The Canadian guidelines for diagnosis of Fetal Alcohol Spectrum Disorders (FASD) recommend the screening of all pregnant and postpartum women for alcohol use. Maternal alcohol screening and recording by health care providers could lead to a reduction of primary FASD disabilities as well as a reduction of secondary disabilities often related to FASD in the absence of diagnosis and appropriate interventions. The earlier in pregnancy a woman can stop drinking, the better the outcome; the younger the age at which the affected child is identified, the lower the frequency of secondary disabilities (20).

Systematic screening for alcohol consumption in high-risk workplaces is recommended (21). However in particular for occupational drivers, a recent Cochrane systematic review (22) concluded that there is insufficient

evidence to advise for or against the use of alcohol testing in their workplace setting for preventing injuries as a sole, effective, long-term solution, however this doesn't say anything about the reduction of alcohol consumption as an outcome, but measured the injury rate.

Which tools should be used to detect alcohol abuse?

Recommendations

In primary care, the abbreviated form of AUDIT (AUDIT-C or first 3 questions of AUDIT) is recommended to detect problematic alcohol use in adults. **Grade 2C**

TWEAK and T-ACE (or AUDIT-C) can be used in antenatal and preconception consultations. **Grade 2B**

Lab tests are not recommended to detect problematic alcohol use. **Grade 2C**

Direct measures of alcohol in breath and/or blood can be useful markers of recent use and in the assessment of intoxication. Measurement of alcohol concentration (in breath and blood) is important when screening for alcohol use in occupational and other settings.

Information for in practice

a) Use of the AUDIT-C

To detect problematic alcohol use with the (Alcohol Use Disorders Identification Test) AUDIT, proceed stepwise **Grade 2C**

1) First complete the AUDIT-C (first 3 questions) **Grade 1C**

2) In case of a score for men (≥ 5) and score for women (≥ 4) after the first 3 questions, complete question 4 to 10 **Grade 1B**

To use the AUDIT (AUDIT-C) an empathic and not-moralizing conversation attitude is very important **Grade 2C**

The AUDIT is a validated test. It has 10 questions and takes about 10 minutes to complete. ^{Note 1} The AUDIT is available from in its English version:

[http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/63/68.pdf&siteID=1&str_title=Alcohol%20Screen%20\(AUDIT\)%20Tool.pdf](http://www.health.nt.gov.au/library/scripts/objectifyMedia.aspx?file=pdf/63/68.pdf&siteID=1&str_title=Alcohol%20Screen%20(AUDIT)%20Tool.pdf)

For French, see: <http://www.sante.public.lu/fr/rester-bonne-sante/030-alcool-dependances/test-audit.pdf>

For Dutch, see:

http://www.vad.be/media/114059/bief%20alcoholproblemen%20aanpakken%20op%20de%20eerste%20lijn_definitief.pdf

Even for overt cases, it is still recommended to use the AUDIT before starting a brief advice. The AUDIT is a good starting point to discuss problematic alcohol use and gives information about severity (17).

If alcohol dependence is indicated from the answers from the AUDIT questionnaire, confirm the diagnosis using the International Statistical Classification of Diseases and Related Health Problems, tenth revision (ICD-10), criteria for alcohol dependence (14, 26).

There is no evidence to use the CAGE as a screening instrument (24).

b) The use of biological tests and lab tests

Lab tests are not immediately available, questionnaires only take a bit more time and the cost of a test is higher. They are useful as a follow-up to the questionnaires. Especially they have a role when patient under-report their consumption.

When patients have a reason for minimising their consumption, biological tests can be applied (**grade B** (13)) or to monitor patients' progress in reducing their drinking. **Grade 2C**.

Direct measures of alcohol in breath and/or blood can be useful markers of recent use and in the assessment of intoxication, for instance in occupational settings (21).

c) Use of the TWEAK and T-ACE

For pregnant women, the TWEAK and T-ACE^{note 2} questionnaires are recommended, but also the AUDIT-C is useful (6, 13, 20, 21). However more research is needed and their use as independent instruments is not proven (27). The T-ACE (Tolerance, Annoyed, Cut down, Eye-opener) is the first validated screening questionnaire for risky drinking developed for pregnant women.

The TWEAK (Tolerance, Worry, Eye-opener, Amnesia, Cut down) is a 5-item screening tool that combines questions from other tests including MAST, CAGE, and T-ACE that were found to be effective in identifying at-risk drinkers.

Evidence

The AUDIT test is a validated questionnaire to detect problematic alcohol use. The review of the NTA and CKS list the AUDIT as a first choice. Other questionnaires are not recommended (14, 17, 23, 24).

The AUDIT has a good sensitivity and specificity to detect problematic alcohol use and is extensively researched (28). The AUDIT-C doesn't differ a lot in validity with the AUDIT (17). The AUDIT-C is a validated screening instrument (29), also tested in French-speaking primary care populations (30), as well as in a large general practice population spread over 69 general practices in Belgium (31).

Evidence on the CAGE test however is ambiguous. Some recommend besides the AUDIT also the CAGE test (either or not + 2 additional questions) (6), (13)). However others don't recommend it because international literature on five shot and CAGE is limited (17, 24) but it might be used as a self-assessment tool or in addition to an appropriate screening method to increase patient's awareness to unhealthy use or abuse of alcohol (24).

*Lab tests of gamma-GT (serum gamma glutamyl transeferase), MCV (mean corpuscular volume), CDT (carbohydrate deficiency transferrin), AST/GOT and ALT/GPT and urine acid have a less good sensitivity and specificity than AUDIT to detect problematic alcohol use and should only be used as an adjunct to other screening methods (**grade A** (21)). To detect liver damage it is useful (17)*

The T-ACE and TWEAK screening tests were designed for use with pregnant women and are adequately sensitive for detecting high-risk levels of consumption; in this the T-ACE perform better than the TWEAK (21).

*Both T-ACE and TWEAK are more specific and sensitive than either MAST or CAGE in identifying risky drinking levels (**Grade 3** (6), **no grade** (21)). Also a recent systematic review confirms the higher sensitivity of T-ACE, TWEAK, and the AUDIT-C for pregnant women. However, there is insufficient evidence on the sensitivity and specificity of these tools outside the United States in representative samples of women and when administered*

as independent instruments. It is necessary to evaluate these screening tools in different settings and populations in order to select the optimal instruments (27).

Clinical question 2: What are the most effective models for referral and collaboration between GPs, OPs, and specialized centres/psychotherapists on alcohol abuse?

Who should be referred and to whom?

Recommendations

General Practitioners refer patients for specialist care in case of:

- Severe withdrawal symptoms such as Wernicke-Korsakov syndrome (13), (19)
- Unexplained neurological symptoms or signs during detoxification (13)
- An AUDIT score of ≥ 20 or when it is assumed that there is alcohol dependence (moderate or severe) (or AUDIT-C score > 8). **Grade 2C** (17) (19) (18) (24)
- Psychiatric co-morbidity, because it requires a complex diagnostic and treatment (e.g. alcohol-related mental health problems) **Grade 2C** (17), (19), (18)
- Physical co-morbidity that can't be cured in primary care (for example, liver disease, alcoholic cardiomyopathy, neuropathy) **Grade 1B** (17),(18)
- If patient and GP choose for referral **Grade 2C** (17), (19)
- If the follow-up indicated that after (repeated) brief advice the problematic alcohol use is not changed **Grade 2C** (17), (32), (18), (24)
- If a brief intervention is indicated and the GP doesn't address it. (17)
- If the patient may benefit from additional evaluation of his/her drinking use and related problems or from motivational interviewing **grade 2A** (24)
- Has previously been treated for an alcohol disorder **grade 2 A** (24)
- Pregnancy with serious alcohol (and/or other drug) problems (to an appropriate hospital unit stabilisation, comprehensive assessment and care planning) (21)

To Whom:

- In general, a person should be referred to a specialist institution for addiction management, or self-help organisations such as Alcoholics Anonymous (19), (17)
- Patients with psychiatric co-morbidity (depression, anxiety, relational problems, psychosis etc.) to social work, first line psychologist, or institution for psychiatric and psychological care **no grade** (19)
- In case of acute intoxication or severe withdrawal symptoms, hospitalisation is required **no grade** (19)
- Alcohol dependent patients should be encouraged to attend Alcoholics Anonymous **Grade C** (13)

Occupational Physicians should refer persons with problematic alcohol use for an effective intervention to specialists in alcohol addiction **Grade 2** (6).

Information for practice

In case of referral, the decision must be mainly guided by the preference of the patient.

(13, 17, 19). Many patients will not accept referral. However attempted referral may have some benefit and patients who recall a physician's advice prior to alcohol treatment have better outcomes (24). Assertive referral practices to Alcoholics Anonymous increase participation and improve outcome (21).

To select the appropriate psychological intervention, the principles of stepped care can be followed for referral of adult patients with alcohol problems and dependence (13), (17), (21). However there is insufficient evidence available.

The stepped care-model requires the use a self-correcting mechanism and implies that patients should first be offered the least restrictive and least costly intervention; if that appears to be insufficient to achieve the patient's agreed treatment goals, the next level of intensity of treatment should be offered until the desired treatment goals are achieved. This approach requires continuous reassessment of the patient, their response to treatment (17, 21, 25). Stepped care occurs when treatment is chosen where possible to match patients' needs and wishes and cause least disruption to their family and their work. With referral, pragmatic considerations will play a role: the own possibilities of the GP, the preparedness of the patient to go to specialist care, the availability in the region and the existence of waiting lists (17).

Evidence

The recommendations are based on consensus and guidelines (14) originating from the Scottish Intercollegiate Guidelines Network (SIGN) and the review of the National Agency for Substance Misuse (NTA) (13, 23). Further, experts recommend that certain groups of patients be offered referral to specialty addictions treatment at the time of the initial brief intervention. The efficacy of referral to specialty addictions care by a primary care provider has not been extensively evaluated but is indicated because many brief intervention trials have excluded patients with the most severe problem drinking, and instead referred such patients to specialty treatment (24).

Interventions in the occupational situation to reduce alcohol consumption lack adequate evidence (6), and therefore referral is advised.

The stepped care model is cost-effective and effectiveness increasing (17). However evidence is still scarce and is required more to recommend this model. None of the studies assessing the effectiveness of stepped case were consistent with the definitions used in a NICE guideline and thus no recommendations could be made.

Clinical question 3: What are the most effective interventions for GPs and OPs to manage alcohol abuse in adult patients?

Background

It is important to make a distinction between the severity levels of alcohol abuse. In a first step of the treatment process, the severity must be determined.

- Hazardous drinking
- Harmful drinking
- Alcohol dependence

NOTE: Management of co-morbidities is not considered here (such as multi-drug use). These persons should be referred to specialist treatment settings.

There are several recommendations for alcohol abusing patients who present in crisis. See note 3.

Assessment of alcohol consumption

Recommendation

When alcohol consumption is detected, the GP must conduct an individual assessment, in order to choose the appropriate referral or treatment (17) (25) (14)

If the OP detects alcohol through occupational breath test screening; the individual should be offered referral for assessment by a clinician with expertise in diagnosis and management of alcohol use disorders (13) (6)

Information for practice

To deliver a brief intervention, the GP can use the ABC-model of Domus Medica. This model recommends first an anamnesis, to explore the alcohol use pattern of the patient (17). This is less extensive than a comprehensive assessment recommended for persons with moderate to severe related alcohol problems (21). The assessment of the drinking pattern (which is done mainly in the AUDIT) and the physical, social and emotional related problems is important before starting treatment (13, 25). The AUDIT score indicates the extent of alcohol use (17).

An assessment helps the patient and clinician identify shared treatment goals and develop a treatment plan, to engage the patient in the treatment plan and motivate the patient to change drinking patterns and related behaviour (21).

Aspects of the assessment (14, 21, 25):

- Carry out a diagnostic interview about the alcohol history and extent
- Assess the person's physical, psychological, and social wellbeing. Ask questions about diet, exercise, mood, and physical symptoms of the complications of alcohol misuse.
- Determine the impact of the person's drinking on others (family, friends, children, and the wider community). Ask about: Work — number of sick days, Family life — financial worries, living arrangements, Relationships — with partners and children, Use of tobacco, cannabis, and illicit drugs, Problems with the legal authorities.
- Enquire about the person's motivation and readiness to change their drinking. It is important to determine the person's commitment to change, as this will influence the goals setting (moderation versus abstinence), timing of the next follow-up appointment (earlier if unlikely to change), and the urgency of referral (if necessary).

Evidence

Previous studies highlight the importance of an assessment (25). Reviews of assessment procedures have outlined the role of clinical interview procedures, identification questionnaires and investigations in developing an assessment of needs.

Self-awareness, with respect to the adverse consequences of drinking, levels of motivation and readiness to change drinking behaviour, vary enormously across the population presenting for alcohol treatment. The need to assess such issues is widely accepted. A recent review of the NTA noted that an understanding of the service user's motivation to change drinking behaviour is a key to effective treatment and can be used to decide on the specific treatment offered' (23, 25).

Due to lack of adequate evidence of effectiveness of interventions in the occupational setting, OPs are advised to refer individuals with alcohol problems for further assessment and treatment to clinicians specialized in substance abuse disorders (6).

Management: psychosocial interventions (non-pharmacological treatment)

Background

There are several types of psychosocial interventions. Brief interventions encompass short feedback and information and last for few minutes, which can occur in the form of brief advice or a simple brief intervention. Extended brief interventions are based on motivational interviewing aspects and last about 20-30 minutes (17). On the other hand there are psychosocial interventions such as Cognitive Behavioural Therapy (CBT), motivational approaches, contingency management treatments and family-based interventions (33). In general the latter are considered as treatments for specifically trained clinicians.

Recommendations

A stepped care approach is recommended as a framework for selecting psychosocial interventions, incorporating assessment, monitoring, implementation of a treatment plan, regular review of progress, and increasing intervention intensity in the absence of a positive response to treatment (21), (13)

GPs should deliver a brief intervention (brief advice) in people with risky pattern of alcohol use and in non-dependent drinkers experiencing alcohol-related harms (hazardous or harmful drinking). Brief interventions are not recommended for people with more severe alcohol-related problems or alcohol dependence. **Grade 1A** (13), (17), (24), (21)

Brief interventions should also be delivered to reduce alcohol consumption in pregnant women by GPs during routine antenatal care **Grade 1B** (13), (20), (21)

Offer an extended brief intervention if the person didn't respond to the brief advice, if the person is refusing referral or they would benefit from it for other reasons (14, 18)

Brief interventions in high-risk workplaces may be used, but should not be a sole intervention strategy (21)

A brief intervention (brief advice or extended brief intervention) should be based on an evidence-based resource such as the FRAMES principles (18) (17) (13) or the FLAGS acronym (21)

Information for practice

For General practitioners

A brief advice is recommended in case of an AUDIT-score between ≥ 8 and 19 for men or ≥ 7 and 19 for women and 65-plus. The highest chance for success is in case of problematic alcohol use for only a few months or if it is not severe. A brief advice is useful when the patient is not (yet) conscious that there is a problem or is not convinced that he must change. A brief advice is even effective for patients who react defensive or surprised, if they are asked about their alcohol use and if the GP argues for change (17).

1. How to deliver brief advice

Discuss the AUDIT-score with the patient. Provide brief advice in an empathic and not condemning way: inform about the personal risks and discuss the need for change. Inform about the acceptable

quantity of alcohol use. Inform that the brief advice provision will be recorded in the medical file. As a support, provide an information leaflet on acceptable alcohol use, the risks and the possibilities to decrease the risk (17).

Feedback about lab assessments may improve the patients' motivation to change. Review assessment, diagnosis, past treatment response, etc. Present treatment options and discuss with the patient and significant others (family and close environment) (24). Treatment plans should be modified according to reassessment and response to interventions (stepped care approach) (21).

Patients should be involved in the goal setting and treatment planning. **Grade 1A** (24), (21)

The brief intervention must be based on principles of motivational interviewing **Grade 1B** (13), (21).

If problematic alcohol use only exists for a few months or is not severe, then anamnesis and education can help to motivate the patient for behaviour change (19) (no withdrawal). If problematic alcohol use exists for longer, a more intensive motivation or short intervention is needed. Motivational interviewing requires appropriate training (13, 19).

Models for brief interventions exist:

- Anamnesis-Guidance-Continuity (ABC)-model: The motivation to change is assessed and there will be sought for an appropriate intervention and follow up (17). This model is not validated yet.
- FRAMES principles (feedback, responsibility, advice, menu, empathy, self-efficacy). It should take 5–15 minutes and should cover the potential harm caused by their level of drinking and reasons for changing the behaviour, including the health and wellbeing benefits cover the barriers to change outline practical strategies to help reduce alcohol consumption (to address the 'menu' component of FRAMES) lead to a set of goals (13, 14).

Repeat the brief advice when there are new signs in the situation of an AUDIT-score ≤ 15 **Grade 1C** (17), (24), (18).

Most patients will not respond to a single brief intervention and repeated brief interventions can be efficacious (24).

2. Extended brief intervention

Adults who have not responded to brief structured advice on alcohol require an extended brief intervention (18, 24). This could take the form of motivational interviewing or motivational-enhancement therapy. Sessions should last from 20 to 30 minutes. They should aim to help people to reduce the amount they drink to low risk levels, reduce risk-taking behaviour as a result of drinking alcohol or to consider abstinence (18). These interventions should be offered only by GPs who received training in relevant skills (14). All people receiving an extended brief intervention should be followed up, and up to four sessions may be given. If this is ineffective, referral to a specialist alcohol treatment service should be considered (14).

3. Other psychosocial interventions

In case brief interventions didn't succeed or dependent alcohol users, will benefit from other psychosocial interventions. Training is required to deliver these interventions. Therefore it is not very likely that GPs can offer these.^{note 4}

Specific information for pregnant women

Brief interventions can be delivered by GPs during routine antenatal care. Women should be advised that low-level consumption of alcohol in early pregnancy is not an indication for termination of pregnancy **Grade 1B** (20).

However for alcohol withdrawal, management is required in a general hospital (Good practice) (21). Pregnant women should be given priority access to withdrawal management and treatment (20). Follow up is important, although medication to sustain abstinence cannot be recommended due to insufficient data (21).

For occupational physicians

Rates of alcohol consumption are particularly high in some workplaces in Australia. In particular, hospitality, agriculture and construction industries have been identified as having a large proportion of people drinking at levels leading to both short- and long-term risk of harm, which can lead to increased accident rates and absenteeism. Occupational physicians should refer persons with problematic alcohol use for treatment (21).

The OP can perform a single brief intervention when excessive alcohol consumption is detected, however its effectiveness is not proven yet. More methodologically quality studies are required (11).

Evidence

a) GP

A systematic review of clinical evidence, found evidence for the effectiveness of brief interventions in primary care (single or multiple sessions) (34). For the management of alcohol addiction by general practitioners, a brief intervention is recommended, since brief interventions in different forms and in several settings are effective to reduce problematic alcohol use to a 'low-risk level'. This is confirmed by recent guidelines and systematic reviews (17). The Number Needed to Treat (NNT) for brief interventions is 8. Most studies don't separate between brief interventions and brief advice. Those who do, show the effectiveness of brief advice to reduce problematic alcohol consumption for men and women. Motivational interviewing is proven to be effective in reducing substance abuse in comparison with no treatment and typically should last 1-4 sessions (35).

b) OP

Web-based feedback, with or without motivational counselling, proved an effective way to reduce risky drinking among young employed people, although another study found challenges in getting people to access and participate in the workplace-assisted website program. A substance misuse prevention training program designed to change work culture, combined with random workplace testing, was successful in reducing injuries in one study (21). The most effective interventions to reduce work-place-related alcohol problems appear to be brief interventions, interventions contained within health and life-style checks, psychosocial skills training and peer referral. But more methodologically quality studies are required (11).

There is not enough adequate evidence yet for the effectiveness of interventions in the workplace in decreasing the alcohol consumption. Therefore the occupational physician must refer persons with problematic alcohol use for care. However motivational talk and referral to specialist care is very important for occupational physicians (6).

Pharmacological management of alcohol abuse

Background

A brief intervention and non-clinical withdrawal can be sufficient for alcohol drinking at hazardous or harmful levels. Only in case of severe withdrawal symptoms that cannot be managed without medication, pharmacological detoxification is required, or when the patient didn't respond to psychological interventions alone (6). Pharmacological treatment in primary care for hazardous or harmful drinking is indicated in the following situations: (i) for the management of withdrawal symptoms and (ii) vitamin supplementation (19).

Wherever possible, all people who are alcohol dependent (according to ICD-10 criteria) (26) should be admitted or referred for specialist treatment in order to determine whether assisted withdrawal (that is withdrawal using drug treatment) is necessary, and to provide psychosocial intervention by trained professionals. This will partly depend on the availability of local services and the wishes of the person (14). It is recommended to refer alcohol dependent persons, because treatment of alcohol dependence in clinical settings is more effective than ambulatory settings(6). If the person refuses referral, assisted withdrawal may be carried out in primary care under the supervision of a non-specialist provided the healthcare professional feels confident (that is, has previous experience with successful assisted withdrawal), knows the person, has the appropriate amount of time (including follow-up arrangements), and the social circumstances are in place to favour community withdrawal (for example the person has a good support network) (14).

For people who misuse alcohol and have co-morbid depression or anxiety disorders, treat the alcohol misuse first as this may lead to significant improvement in the depression and anxiety. If depression or anxiety continues after 3 to 4 weeks of abstinence from alcohol, assess the depression or anxiety and consider referral and treatment in line with the relevant NICE guideline for the particular disorder (25).

Recommendations

Ambulatory withdrawal is appropriate for those with mild to moderate predicted withdrawal severity, with safe home environment and social support, no history of severe withdrawal complications (e.g. seizures) and no severe concomitant medical, psychiatric or other substance use disorder **Grade 2A** (21)

Monitor during ambulatory withdrawal by managing withdrawal symptoms, use repeated standardized assessments, daily or every other day follow-up by medical staff or nurses by using urine toxicology or breathalyzer test **Grade 2A** (24)

Benzodiazepines are preferred to manage withdrawal symptoms in alcohol detoxification by GPs **Grade 1A** (13), (36), (19), (6) (24), (21), but for a maximum period of seven days (21).

Alcohol withdrawal alone does not prevent recurrent alcohol consumption, additional interventions are recommended **Grade 2A** (21)

Alcohol withdrawal for pregnant women should not be managed by GPs but in a general hospital (21)

Information for practice

In case of no medication

Medication is not always indicated for alcohol withdrawal, it is inappropriate when cessation of drinking is unlikely to be complicated in milder dependence (13, 14). Medication may not be necessary if:

- The patient reports consumption less than 15 units/day in men and 10 units/day in women and reports neither recent withdrawal symptoms nor recent drinking to prevent withdrawal symptoms.
- The patient has no alcohol on breath test, and no withdrawal signs or symptoms.
- The person is a binge drinker with periods of abstinence, unless alcohol use is very heavy (more than 20 units per day) or binges last for more than a week.

When medication to manage withdrawal is not needed, GPs should inform patients that sudden abstinence of alcohol can cause withdrawal symptoms such as sleeping problems, anxiety, headache, intestinal problems, hypertension and tremors (13) (19).

Vitamin supplementation

Thiamine to all patients undergoing alcohol withdrawal (21).

Patients who have a chronic alcohol problem and whose diet may be deficient should be given oral thiamine indefinitely, for as long as malnutrition is present^{note 5}. Once or twice a day vitamin B1 of 100 mg (13), (19). If the patient is following again a healthy diet, the dose can be gradually reduced in one month. Prescribe oral thiamine 50 mg per day (as a single dose) during the maintenance stage following withdrawal, and for as long as malnutrition may be present (14).

In case of severe malnutrition with signs of neuropathy, memory problems or severe stomach- or intestinal problems, the first days a parenteral dose of 100 mg of thiamine is recommended (14, 19).

Recommended medication for withdrawal

Tapered fixed dose regimen of benzodiazepines is recommended for primary care detoxification. They are not recommended in case of a history of illegal drug misuse/misuse of benzodiazepines (24). Dose and withdrawal scales should be individualized **Grade 2A** (24)

Diazepam is recommended (in Australia) as first-line treatment because of its rapid onset of action, long half-life and evidence for effectiveness **Grade 1A** (21)

An alternative for benzodiazepines in the ambulatory settings is carbamazepine. This is effective in reducing mild to moderate withdrawal symptoms and can be considered in patients that cannot use benzodiazepines **Grade 2A** (21), (36)

Other type of benzodiazepines or medication:

- The preferred benzodiazepine in the Netherlands and the UK is chlordiazepoxide (100 mg/day divided over 4 intake moments with highest dose for the night), with gradual tapering over 5-7 days (13) (19). In Belgium this drug is no more available.
- Shorter-acting benzodiazepines are preferred (lorazepam, oxazepam, midazolam) if the clinician is concerned about accumulation and over sedation from diazepam such as severe liver disease, recent head injury, respiratory failure, obese patients, or where the diagnosis is unclear (21)

- Natriumdivalproate has probably a favourable effect on the withdrawal symptoms and results in less use of benzodiazepines (6).
- Topiramate is possibly as much effective as diazepam in the treatment of withdrawal symptoms (6).
- α 2-agonist clonidine is effective in reducing withdrawal symptoms. Clonidine however has risky side effects such as hypotension and sedation (6).

Monitoring and support

Monitoring during ambulatory withdrawal is important. There are several principles:

a) Managing withdrawal symptoms: either symptom-triggered therapy **Grade 1A** (24) or either a predetermined fixed medication dose with gradual tapering, but inferior to symptom triggered **Grade 1B** (24).

b) Standardized assessments such as CIWA-Ar scale^{note 6}, AWS or COWS to guide dosing decisions or assess withdrawal symptoms (in order to manage them with e.g. symptom-triggered therapy) but should not be used as diagnostic tools (24), (6), (21).

c) Other procedures for safe monitoring of ambulatory withdrawal is daily assessment of the patient (24). Indicators of treatment response include ongoing substance use, craving, side effects of medication, emerging symptoms, etc. Consider obtaining biological markers of recent substance use. Assess co-occurring medical problems associated with substance use through history, physical exam and appropriate laboratory evaluation (24). A GP must have a breathalyser for daily monitoring of breath alcohol level and use in an acute situation (13).

During alcohol withdrawal supportive care must be provided. Supportive counselling should be provided to maintain motivation, provide strategies for coping with symptoms, and reduce high-risk situations (21). Patients (and carers) should be provided with information about the likely nature and course of alcohol withdrawal, and strategies to cope with common symptoms and cravings (21).

At all stages of withdrawal, seek advice from an appropriate specialist if complications develop, or consider admission or referral (14).

Severe acute withdrawal symptoms

Severe withdrawal symptoms are ideally managed in a hospital setting. Any patient who presents with unexplained neurological symptoms or signs during detoxification should be referred for specialist assessment (13).

If the patient presents at the primary duty of care service, the GP should be able to offer acute care management before referring to specialist care settings. Severe withdrawal symptoms include tactile and visual hallucinations, seizures and delirium (6).

Alcohol withdrawal delirium requires hospitalisation (21). Patients with any sign of Wernicke-Korsakov syndrome should receive urgently parenteral thiamine (Vitamine B1 Sterop) in a setting with adequate resuscitation facilities, ideally in an inpatient setting (**Grade D**) (13).

To prevent de novo seizures during alcohol withdrawal syndrome, long acting benzodiazepines or carbamazepine are effective (**grade 1**) (6). Benzodiazepines are also effective for the prevention and management of delirium (**grade 1**) (6).

In case of no response to treatment

1. For patients who are not improving, they should change to another medication or intervention; or change the treatment intensity by: Increasing the intensity of care, the dose of the medication or adding a medication.

2. For patients who do not stabilize and refuse to engage in any type of ongoing care with any provider (e.g., medical, psychiatric, or addiction specialty) episodic attention to substance use may be accomplished by the following: Provide crisis intervention, as needed. At any contact initiated by the patient: Assess current substance use, Recommend that the patient accept ongoing care in the most appropriate setting, Designate a single provider to coordinate care for patients who repeatedly present in crisis, Consider involving supportive family members or significant others, if the patient agrees. Initiate involuntary treatment procedures, if imminent threat to safety occurs (e.g., suicidal, violent, or unable to care for self). Continue to reinforce and endorse increased appropriate engagement and adherence.

3. Consider consultation with mental health or 'substance use disorder' specialty (24)

Pregnant women

Alcohol withdrawal for pregnant women should not be managed by GPs but in a general hospital (21). There is a need for high quality research to determine the effectiveness of pharmacologic interventions in pregnant women enrolled in alcohol treatment program (37).

Evidence

Evidence, based on randomised controlled trials (RCTs), has shown that benzodiazepines are currently the best drug group for alcohol dependence detoxification. The studies are of variable quality, with some reporting on small numbers of patients (21, 38). Although the evidence is mostly derived from inpatient studies, the conclusions are generalizable to primary care. Benzodiazepines can cause temporary cognitive slowing and may interfere with learning and planning. This and the need to avoid benzodiazepine dependence are reasons for keeping the length of treatment to a maximum of seven days (21).

There is insufficient evidence of RCTs to be confident of a difference between Gamma-hydroxybutyrate (GHB) and placebo, or to determine reliably if GHB is more or less effective than other drugs for the treatment of alcohol withdrawal or the prevention of relapses. The small amount of randomised evidence available suggests that GHB 50mg may be more effective than placebo in the treatment of AWS, and in preventing relapses and craving in previously detoxified alcoholics during the first 3 months of follow-up (39).

Not effective: Valproate (21) and phenytoin (21), (6). Clomethiazole should not be used in alcohol detoxification in primary care and antiepileptic medication should not be used as the sole medication for alcohol detoxification (13). Clonidine and beta-blockers not effective as monotherapy (24). Magnesium is not effective (6). Limited evidence for effectiveness: anticonvulsants (21) (40), however they should be continued during withdrawal in taking in for instance epilepsy.

Antipsychotic medication should not be used as sole medication for alcohol detoxification in primary care (13). It should only be used as adjunct to adequate benzodiazepine therapy for hallucinations or delirium (21), (13).

There is no evidence for the effectiveness of pharmacologic interventions in pregnant women enrolled in alcohol treatment (37).

Maintenance: Follow-up and preventing relapse

Immediate follow-up and subsequent treatments following alcohol withdrawal will usually be carried out by specialists in secondary care; if this has not occurred it is important to offer support in the primary care setting (14).

Recommendations

Long-term participation in self-help groups (such as Alcoholics Anonymous or SMART recovery) can be an effective strategy to maintain abstinence from alcohol for some patients **Grade 2C** (21), (6), (14).

Acamprosate is recommended in newly detoxified dependent patients as an adjunct to psychosocial interventions **Grade 2C** (13), (6), (19). Although it is usually initiated in specialist settings, acamprosate is often continued in primary care for up to a year, and can be initiated by GPs if necessary (13, 14).

Supervised oral disulfiram may be used to prevent relapse but patients must be informed that this is a treatment requiring complete abstinence and be clear about the dangers of taking alcohol with it **Grade 2C** (13), (6), (19).

Primary care teams should maintain contact over the long term with patients previously treated by specialist services for alcohol dependence (13), (21), (14).

Information for practice

Links and support

Clinicians should facilitate links to post-withdrawal treatment services during withdrawal treatment (21).

Advice and feedback

Provide positive feedback to patients for decreases in drinking. Relate changes in drinking to any changes in presenting health conditions. Advise patients who screen positive for Unhealthy Alcohol Use but who report drinking below recommended limits to continue to drink below recommended limits (24). Ask the patient about any use, craving, or perceived relapse risk. Provide feedback to patient regarding improvement or deterioration in laboratory assessments affiliated with substance use. Encourage abstinence or reduced use, consistent with the patient's motivation and agreement. Convey openness to discuss any future concerns that may arise and encourage the patient to discuss them with you (24).

Pharmacological follow-up

The *pharmacological treatment* to prevent relapse is for the addiction specialist or centres for mental health (CGG in Belgium).

First choice: Acamprosate is recommended in newly detoxified dependent patients as an adjunct to psychosocial interventions. Acamprosate will usually be initiated by a specialist service within a few days of successful detoxification. If a specialist service is not available, the GP should offer acamprosate, monitor its efficacy and provide links to local support organizations (13). Motivational interventions at the start of the treatment with acamprosate are crucial for a successful treatment outcome (41).

Second choice: Supervised oral disulfiram may be used to prevent relapse but this requires complete abstinence and includes dangers of taking alcohol with it.

Naltrexone and disulfiram are not recommended in primary care (13, 14, 19).

Disulfiram intake: supervision may be undertaken by the spouse, healthcare or support worker or the workplace representative, if appropriate.

Acamprosate is recommended as relapse prevention for alcohol-dependent patients. Disulfiram is recommended in closely supervised alcohol-dependent patients motivated for abstinence and with no contraindication (21) Disulfiram is second choice after acamprosate and naltrexon, because it has several contra indications (6).

Before starting treatment with acamprosate, oral naltrexone or disulfiram, conduct a comprehensive medical assessment (25).

Evidence

The health technology assessment by NHS Quality Improvement Scotland included meta-analyses of the efficacy and cost effectiveness of medications for relapse prevention and found evidence of efficacy for disulfiram (supervised) and acamprosate, and was confirmed by other reviews. Disulfiram's function is to deter the patient from resuming drinking. If taken regularly there is an unpleasant reaction when alcohol is consumed. It has unwanted effects in some patients, and carries special warnings. The health technology assessment by NHS Quality Improvement Scotland found some support for the use of supervised disulfiram and none for its non-supervised use (13). Supervised treatment with disulfiram has some effect on short-term abstinence and days until relapse as well as number of drinking days when compared with placebo, none, or other treatments for patients with alcohol dependency or abuse (42).

The effect of medication to prevent relapse is reinforced by adjunct psychosocial interventions (6).

Clinical question 4: What are the most effective methods for GPs and OPs to detect illicit drug use among adult patients?

Who to screen?

Recommendations

Clinicians should consider asking people about recent drug use if they present with symptoms that suggest the possibility of drug misuse, for example: acute chest pain in a young person, acute psychosis or mood and sleep disorders. (16) (43), (33).

All pregnant women and women of childbearing age should be screened periodically for illicit drug use **Grade 1A** (44).

Information for practice

While clinicians should be alert to the signs and symptoms of illicit drug use in patients, the added benefit of screening asymptomatic patients in primary care practice remains unclear (24),(43).

Which persons should be screened for illicit drug use (16):

1. If the person requests help

- With an active request for help with drug dependency (e.g. the user has realized that there are problems associated with taking drugs, or the user has become motivated to change behaviour, or a crisis has developed; perhaps as a result of an impending court case, health or relationship problems).
 - With an active request for help with alcohol dependency. Always ask about drug misuse.
2. If the person presents with a complication of drug misuse
- Medical history: complications of drug use (e.g. abscess; thrombophlebitis; recurrent chest infections; hepatitis A, B, or C infection; HIV infection).
 - With clinical features of opioid intoxication or withdrawal: Sweating, watering eyes, rhinorrhoea, yawning, feeling hot and cold, goose flesh (goosebumps), dilated pupils, cough, Anorexia, abdominal cramps, nausea, vomiting, diarrhoea, increased bowel sounds, Tremor, insomnia, restlessness, anxiety, irritability, tachycardia, hypertension, Generalized aches and pains
3. Suspected by certain features in the presentation
- Psychiatric history: overdoses, depression, psychosis (not specifically an indicator of opioid misuse but may be linked to polydrug use).
 - Forensic history: past custodial sentences, probation or community service.
 - Social history: family problems, unemployment, accommodation issues or financial problems.
4. By disclosure of drug misuse while consulting with another medical problem.
5. On physical examination, there may be evidence of poor nutrition, dental caries, other signs of neglect, needle tracks, skin abscess, and signs of drug intoxication or withdrawal.
6. On mental health assessment, there may be indications of abnormal general behaviour, disorders of mood (particularly anxiety or low mood), delusions or hallucinations, confusion.

Evidence

There is insufficient evidence to support screening for drug use/abuse in unselected primary care populations (24). The signs that indicate the need for screening are in line with expert advice from the Royal College of General Practitioners (16).

Tools to detect illicit drug abuse

Recommendations

Healthcare professionals should use biological testing (for example, of urine or oral fluid samples) to confirm drug use, as part of a comprehensive assessment, but they should not rely on it as the sole method of diagnosis and assessment. The tests can provide objective evidence of drug use, but do not distinguish occasional users from impaired drug users. (16), (43), (33).

Psychometric instruments can be used only as adjuncts to clinical assessment, they are not recommended for the identification of drug use (45).

When testing for substance use is clinically indicated for pregnant women, urine drug screening is the preferred method **Grade 1A** (44).

Information for practice

Biological testing

- Analysis of urine remains the most reliable tool for identifying drug use in a drug-using population (33). Different opioids persist in the urine for different lengths of time (e.g. up to 48 hours for heroin, up to 7–9 days for methadone metabolite) (16). This makes it difficult to distinguish between occasional and habitual users (43).
- The major advantages of oral fluid drug testing are that it is less intrusive than urinalysis and that oral fluid can be relatively easily obtained. These properties enable oral fluid testing to be conducted by personnel with relatively little training and make it less open to adulteration (33). On the other hand, many opioid users will have a dry mouth on presentation for detoxification and may have genuine difficulty in providing a suitable sample (45). Mouth swab tests (saliva and oral mucosal transudate) provide information about recent drug use, but there is a shorter detection window (e.g. heroin can be detected only up to 24–48 hours later with mouth swabs) (16), (45).
- The testing of human scalp hair for drug use has the potential for detecting drug use over a longer period than urine or oral fluid testing. Hair analysis is also potentially less intrusive than urinalysis (33).

If opioid dependence or tolerance is uncertain, healthcare professionals should, in addition to biological tests, use confirmatory laboratory tests (45). This is particularly important when:

- a young person first presents for opioid detoxification
- a biological test result is inconsistent with clinical assessment
- Complex patterns of drug misuse are suspected

Questionnaires

Several identification questionnaires have been developed to identify drug misuse. These may be of potential use for identifying drug misuse in at-risk populations, but must be used as an adjunct to clinical assessments^{note 7}.

- ASSIST: The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) is an eight item pencil and paper questionnaire developed in 1997 by World Health Organization in response to the overwhelming burden of disease caused by substance use. The ASSIST screens for problem or risky use of tobacco, alcohol, cannabis, cocaine, amphetamine-type stimulants, sedatives, hallucinogens, inhalants, opioids and other drugs (24),(53).
- The Drug Use Disorders Identification Test (DUDIT) is based on the WHO's validated and widely used Alcohol Use Disorders Identification Test (AUDIT). DUDIT consists of 11 clinician-rated items covering domains of drug consumption, dependence and problems associated with use (33). There is not enough evidence to use this test (53).
- The CAGE questionnaire has been adapted to include drugs (CAGE-AID). CAGE was originally developed to identify alcohol misuse and in that context has acceptable sensitivity and specificity (33).
- The Chemical Use Abuse and Dependency (CUAD) scale is clinician rated and has been developed and used in psychiatric populations (33)
- Of the questionnaires, DUDIT had the highest sensitivity and specificity and was also relatively quick to administer (11 items). However, this has not been validated outside of a known drug-using population in the UK and would require further research before it can be recommended for general use. It is also important to note that most of the other questionnaires have only been studied in North American psychiatric populations and their validity in other settings is unknown (33)

Pregnant women

Informed consent should be obtained from the woman before maternal drug toxicology testing is ordered (44). Policies and legal requirements with respect to drug testing of newborns may vary by jurisdiction, and caregivers should be familiar with the regulations in their region (44).

Evidence

Laboratory tests

However, caution must be exercised when interpreting results of urine analysis, as there are a number of products commercially available specifically designed to produce false negative urinalysis results by seeking to remove illicit drugs from the body. These substances have the ability to either dilute urine samples or partially eliminate drugs, thereby making detection of illicit drugs difficult (45). A recent targeted screening study by Tomaszewski and colleagues (2005) in a US emergency department found promising sensitivity and specificity for near-patient urine testing for opioids (sensitivity=100%, specificity=98.7%) and cocaine use (sensitivity=96.8%, specificity=100%), but lower sensitivity for cannabis use (sensitivity=87.5%, specificity=99.3%) when a comparison was made with confirmatory laboratory tests.

Questionnaires

While clinicians should be alert to the signs and symptoms of illicit drug use in patients, the added benefit of screening asymptomatic patients in primary care practice remains unclear. Toxicological tests of blood or urine can provide objective evidence of drug use, but such tests do not distinguish between occasional users and those who are impaired by drug use. A few brief, standardized questionnaires have been shown to be valid and reliable in screening adolescent and adult patients for drug use/misuse. However, the clinical utility of these questionnaires when widely applied in primary care settings is uncertain because of insufficient evidence. The reported positive predictive values are variable and at best 83% when the questionnaires are applied in a general medical clinic. Moreover, the feasibility of routinely incorporating the questionnaires into busy primary care practices has yet to be assessed. The development of questionnaire tools for identification of drug misuse is in its infancy in comparison with the equivalent methods for detection of alcohol misuse. Although some measures had reasonable sensitivity and specificity, the evidence base for this was often drawn only from one or at best two studies (43).

The findings from studies demonstrated that the ASSIST is a feasible, reliable and valid screening instrument for use in primary health care settings across various cultures (21, 24). A five-minute brief intervention was developed using the ASSIST Feedback Form to give personalized feedback and advice to clients about their ASSIST scores and their associated level of risk. Preliminary findings from the Australian site based on analysis of 100 subjects demonstrated a significant reduction in illicit drug use ($F=12.0$; $df=1,98$; $p=0.001$) for those subjects receiving a brief intervention compared with control subjects not receiving an intervention. These results demonstrate that ASSIST screening and brief intervention is a timely and effective way of identifying and intervening with substance-using clients in primary health care settings (24)

The ASSIST was validated in several contexts, however in Belgium the screening test for use in the general practice was not done among a large sample of primary care practice settings ($n=5$) (46).

Urinalysis and oral fluid testing appear to be useful methods of identifying drug use; however, both testing matrices have associated problems. Urinalysis is not easy to administer as a routine identification instrument and has also low acceptability to service users in non-specialist healthcare settings, while oral fluid has a more limited window of opportunity for detecting drug use and there is limited research assessing possible interference or manipulation of samples. However, these two testing methods appear to be more easily implemented than hair analysis, which requires a great deal more expertise (33).

The validity, reliability and clinical utility of standardized questionnaires in screening for illicit drug use during pregnancy have not been adequately evaluated (43).

For pregnant women, urine, hair, and meconium samples are sensitive biological markers of substance use. Evidence shows that the addition of urine drug testing to the structured maternal interview can increase the detection of problematic substance use in pregnancy. Detection can facilitate early intervention, including treatment of maternal and neonatal withdrawal and counselling and referral for long-term outpatient treatment. Although child protection agencies sometimes request hair analyses, neither hair nor meconium is appropriate for routine clinical use because of the high costs and propensity for false positive results (44).

Clinical question 5: What are the most effective models for referral and collaboration between GPs, OPs, and specialized centres/psychotherapists on illicit drug use?

Who to refer and to whom?

It is important to adopt a multidisciplinary approach to the management of people with opioid dependence. Drug users have multiple needs and it is important that GPs work with others to help deliver effective care to them. The level of expertise required to manage the person may alter over time (16)

Recommendations

People presenting for opioid detoxification should be assessed to establish the presence and severity of opioid dependence, as well as misuse of and/or dependence on other substances, including alcohol, benzodiazepines and stimulants (45).

Persons must be referred to specialist care in case they: (45)

- Had no benefit from previous formal community-based detoxification
- Need medical and/or nursing care because of significant comorbid physical or mental health problems
- Require complex polydrug detoxification, for example concurrent detoxification from alcohol or benzodiazepines
- Are experiencing significant social problems that will limit the benefit of community-based detoxification

Pharmacological treatment of opioid dependence should be widely accessible; this might include treatment delivery in primary care settings. Co-morbid patients can be treated in primary health-care settings if there is access to specialist consultation when necessary (47).

Refer all woman to an obstetrician and/or a midwife specializing in drug misuse (depending on local expertise) and to the local drug dependency service (16).

Information for practice

Additional to the assessment consider also the person's current social and personal circumstances, including employment and financial status, living arrangements, social support and criminal activity. Consider the impact of drug misuse on family members and any dependants (45). Integration of opioid dependence treatment into primary care is one way to increase accessibility, although it may not be possible in all settings. Primary care practitioners will usually need support from the specialist system, through mentoring, training, consultation and referral. With such support, patients with

quite complex co-morbidity can be safely managed in primary care. Opioid agonist maintenance treatment, opioid withdrawal services and relapse prevention services can all be provided in primary care settings, given the right conditions (47).

Evidence

Currently, the evidence for the importance of setting in affecting the outcome for detoxification is very sparse, with little research being available to guide clinicians about the service and setting in which users are likely to do well. The evidence base comparing detoxification in inpatient and community-based settings is limited. There is some evidence suggesting inpatient detoxification is more effective than community-based detoxification. But two of the three trials had significant methodological limitations that make these findings difficult to interpret (45).

Clinical question 6: What are the most effective methods for GPs to manage illicit drug use among adult patients?

Background

The following recommendations concern mainly opioid dependency. Other drugs are mentioned less here, since evidence is lacking.

Individual assessment

Recommendation

Management of illicit drug use in primary care is advised if the patient (24)

- Refuses referral to specialty care but continues to seek some services;
- Has serious co-morbidity that precludes participation in available specialist substance abuse care;
- Repeatedly engaged in specialist substance abuse treatment with minimal progress towards abstinence or sustained improvement.

An extensive individual assessment should be done before choosing the appropriate treatment, to confirm opioid dependence by history and examination, including physical examination, and by toxicology screening using urine or oral fluid swabs. (36), (45), (47), (24), (16).

A pharmacological agent with proven efficacy does not exist for treatment of cocaine and amphetamine abuse and dependence (69). Psychosocial management, such as contingency management, CBT, behavioural couples therapy etc. should be considered (33).

There is no clear conclusion but it appears that all psychotherapies tested (Cognitive-behavioural (CBT), motivational enhancement) have been demonstrated to be effective to reduce cannabis use delivered both in individual or group sessions (70).

Assess response to treatment and evaluate treatment plan. After treatment, follow-up of the person is recommended (24).

Information for practice

Some patients may be able to be managed effectively in non-specialty care, and will not require referral to specialty care. Factors that are associated with the potential for good outcome in non-specialty care include the availability of a willing provider with whom the patient has an established relationship, lower severity and chronicity of the substance abuse disorder, active involvement with

recovery supports in the community, favourable prior treatment response, and patient's preference for non-specialty care rather than specialty care treatment (24)

Prior to the treatment, a detailed individual assessment should be conducted (16, 24, 45, 47).

Including:

- Determine why the person has presented and what their expectations are
- To confirm drug use and the degree of dependency with urinalysis; consideration may also be given to other near-patient testing methods such as oral fluid and/or breath testing
- Gather information on the person's drug use and the impact this is having on their life
- Motivation to stop or change their pattern of drug misuse
- Social and forensic history
- Assess whether involving other services, such as the local specialist drug team, is appropriate
- Establish parental status and any immediate risk to children, living conditions
- Past treatment experiences
- Medical and psychiatric history
- At-risk behaviour. Ask about their supply of needles and syringes; sharing habits; knowledge of how to inject safely; correct disposal of used equipment; cleaning of equipment; knowledge of HIV and hepatitis A, B, and C; issues of transmission and safer sex.
- Current or past complications
- Misuse of and/or dependence on other substances, including alcohol, benzodiazepines and stimulants. Use urinalysis to aid identification, Consideration may also be given to other near-patient testing methods such as oral fluid and/or breath testing
- Clinical examination (assessment of intoxication / withdrawal, injection marks) and, if necessary, investigations (such as urine drug screen, HIV, Hep C, Hep B, TB, liver function). Screening for psychiatric and somatic co-morbidity should form part of the initial assessment
- It must be assessed if the person is suited for substitution therapy (maintenance or detoxification). Areas to consider: (1) Is the person currently taking opioids and dependent on these? (Confirmation of opioid use does not mean that the person is dependent, or tolerant of opioids.) (2) Is the person suitably motivated to change their drug taking behaviour and participate in a detoxification or maintenance therapy programme? (3) Is it safe for the person to have substitution therapy?

The GP should conduct this assessment in an empathic and non-judgmental way. Conclusions from the assessment should be shared with the patient (24).

Evidence

There is no good available research to guide the clinician about the outcomes or cost-effectiveness of inpatient or outpatient approaches to opioid detoxification (48)

These recommendations for assessment are based on expert advice from the Department of Health and the National Treatment Agency, the National Institute for Health and Clinical Excellence and the Royal College of General Practitioners (16, 45, 49-51)

Testing and assessment are important aspects in the management of detoxification. Clinical assessment is important in deciding if detoxification is appropriate for the service user (that is, if he or she is opioid dependent) and, if so, how most effectively to manage the detoxification. Assessment is also important during detoxification, including the careful monitoring of the service user's progress and the level of his or her withdrawal symptoms (45). It is important that any opioid detoxification regimen should be appropriate to the

service user's degree of dependence and the extent of the withdrawal symptoms he or she experiences. Errors have occurred where service users have persuaded the healthcare professional conducting a clinical assessment that their degree of opioid use and/or dependence is significantly greater than it is in reality; in some such cases they have had no dependence on or even use of opioid drugs at all. This can lead to the prescription of dangerously high doses of opioids. Adequate assessment of a service user's opioid dependence status is therefore crucial prior to undertaking opioid detoxification. Opioid dependence is normally diagnosed primarily through a clinical assessment but can be assisted by testing for drugs in biological fluids and by the use of psychometric measures (45).

Pharmacological management of opioid dependence

Background

In a first stage there must be decided if the person requires substitution therapy (maintenance or detoxification), i.e. the person must be dependent on opioids and he must be motivated to change his drug taking behaviour. In a next step there must be decided among maintenance or detoxification (opioid withdrawal) therapy. Discuss goals and benefits of maintenance treatment and discuss detoxification (16).

Recommendations

Medically supervised opioid withdrawal is rarely effective as a long-term strategy for treatment of opioid dependence because of high relapse rates compared to maintenance. Opioid agonist treatment (OAT) is the first line treatment of choice for chronic opioid dependence **Grade 2A** (24), (47), (45), (24).

Methadone is the preferred agonist. **Grade 1A** (47), (24).

Appropriate psychosocial interventions should be provided as part of the opioid agonist therapy (i.e. counselling etc.) **Grade 2A** (24), (47), (45), (47).

For opioid-dependent patients not commencing OAT, consider antagonist pharmacotherapy using naltrexone following the completion of opioid withdrawal. (47).

Methadone maintenance should be used in pregnancy in preference to buprenorphine maintenance for the treatment of opioid dependence; although there is less evidence about the safety of buprenorphine, it might also be offered. **Grade 1A** (47), (44), (47).

Information for practice

General considerations for GPs before treatment

In case of co-morbidity, if the person is also alcohol dependent, alcohol detoxification should be offered, before starting opioid detoxification in a community setting. If a person presenting for opioid detoxification is also benzodiazepine dependent, healthcare professionals should consider benzodiazepine detoxification (45).

Patients must give informed consent for treatment (47).

Up-to-date medical records should be kept for all patients. These should include, as a minimum, the history, clinical examination, investigations, diagnosis, health and social status, treatment plans and

their revisions, referrals, evidence of consent, prescribed drugs and other interventions received (47).

Shared decision-making is important. Feedback about lab assessments may improve the patients' motivation to change. Review assessment, diagnosis, past treatment response, etc. Present treatment options and discuss with patient and significant others. Determine which treatments could be offered in general healthcare. Involve patient in selecting treatment goals (24).

GPs and OPs must provide the advice to not drive when it is detected that a person uses cannabis. A recent systematic review found, a near doubling of risk of a driver being involved in a motor vehicle collision resulting in serious injury or death in case of acute cannabis consumption (52).

In addition advice on the risk for HIV, hepatitis and tetanus and information about support services must be provided (16).

Motivational interviewing is proven to be effective in reducing substance abuse in comparison with no treatment and typically should last 1-4 sessions (35).

Cognitive behavioral treatment appears to be effective, especially for treating women and cannabis abuse (53).

1. Maintenance therapy for opioid dependence

a) Methadone, as an oral solution, is the therapy of choice. Optimal doses for methadone are usually between 60 to 120 mg/day and may exert clinical effects for between 24 to 36 hours; low doses exert clinical effects for only a few hours (47).

During methadone induction, the initial daily dose should be between 10 and 30 mg/day (16), (47). Determine the necessary maintenance dose of methadone by titration: Titrate against withdrawal symptoms (warn the person about the possibility of these occurring). Increase the dose cautiously, but not too slowly, until signs of withdrawal have disappeared: Over the first week, the daily incremental increase should be no more than 10 mg. The total weekly increase over the first week should be no more than 30 mg above the starting dose (16).

b) In case of buprenorphine, the second choice for maintenance agonists, doses should be at least 8 mg per day (up to 16 mg) (47) and should be used in combination with naloxone (Suboxone®) (24). But doses higher than 16 mg per day are most effective for retention (54). For more information on buprenorphine dosing, see (16).

Important considerations:

- Methadone and buprenorphine doses should be directly supervised in the early phase of treatment (47).
- Take-away doses may be provided for patients when the benefits of reduced frequency of attendance are considered to outweigh the risk of diversion, subject to regular review (47).
- Appropriate adjustment of opioid agonist doses to maintain a therapeutic range between signs/symptoms of overmedication (e.g. somnolence, miosis, itching, hypotension, and flushing) and opioid withdrawal (e.g. drug craving, anxiety, dysphoria, and irritability) (24).

Adding psychosocial interventions to agonist maintenance treatment is not necessary more beneficial (55).

Pregnant women

Methadone is the first-line treatment for chronic non-cancer pain and concurrent opioid dependence (44). Other slow-release opioid preparations may be considered if methadone is not available (44).

The role of Naltrexone in maintenance

Naltrexone (Nalorex®) is a long-acting opioid-antagonist, is less addictive than methadone and blocks effectively heroin effects (56). Naltrexone maintenance is considered only in highly motivated opioid dependent patients (ensure that patients are opioid-free as naltrexone is an antagonist and may precipitate withdrawal) (24). It can be helpful following detoxification in enabling a patient to maintain abstinence. It is recommended as a treatment option in people who have successfully completed detoxification (i.e. formerly opioid-dependent people) (16). In opioid-dependent patients post opioid withdrawal, naltrexone is effective in reducing heroin/drug abuse; however, its effectiveness in preventing relapse depends on patient retention / adherence.

Most opioid users are sceptical about treatment with naltrexone tablets and many drop out early on. Dropouts can be reduced with supervised tablet taking, offering incentives and using sustained-release naltrexone such as subcutaneous implants or depot injections. Implant naltrexone may be more effective than oral naltrexone, but insufficient evidence exists (56).

Carefully start oral naltrexone at a dose of 25 mg once daily. If no signs of withdrawal occur, the dose may be increased to 50 mg daily on the following day. Extended dosing intervals, using equivalent weekly doses, may be used for supervised administration (24).

Evidence

Urgent consultation with an addiction specialist is recommended to facilitate rapid access to MMT during pregnancy (44).

Methadone maintenance therapy is the first choice treatment. A recent Cochrane systematic review indicated that methadone is an effective maintenance therapy intervention for the treatment of heroin dependence as it retains patients in treatment and decreases heroin use better than treatments that do not utilise opioid replacement therapy (i.e., detoxification, offer of drug-free rehabilitation, placebo medication, wait-list controls) (57)

*Methadone may be slightly more efficacious than buprenorphine in decreasing opioid use and in retaining patients in treatment, particularly in patients with co-occurring cocaine dependence (24). Methadone or sublingual buprenorphine/naloxone maintenance as first line treatments due to their documented efficacy in improving retention and reducing illicit opioid use and craving, are strongly recommended (**Grade A** (24))*

Higher doses of methadone (60 to 100 mg/day) were more effective than lower doses (1 to 39 mg/day) in retaining opioid users in therapy and in reducing illicit use of heroin and cocaine during treatment (58).

Although drug-specific pharmacotherapy (e.g., buprenorphine for opiate abuse) and/or counselling interventions (e.g., brief motivational counselling for cannabis misuse) have been proven effective in reducing short term illicit drug use, the longer term effects of treatment on morbidity and mortality have been inadequately evaluated. Moreover, these treatments have been studied almost exclusively in individuals who have already developed medical, social, or legal problems due to drug use, and their effectiveness in individuals identified through screening remains unclear. In all but one trial, treatment was delivered outside the primary care setting, often in specialized treatment facilities (43).

There is no definite evidence showing that slow-release oral morphine (SROM) is an effective alternative to methadone for opioid maintenance treatment (OMT) (59)

For the considered outcomes, it seems that adding any psychosocial support to standard maintenance treatments do not add additional benefits. Eventually, the results of the review on maintenance treatments clearly show that provision of methadone maintenance treatment should not be abandoned in the absence of resources for additional psychosocial treatment (55). Methadone with counselling is more effective than methadone alone (24).

Naltrexone is recommended as a second option, because it has no positive psychoactive effects and is unpopular with many opioid dependent patients since naltrexone maintenance therapy requires complete abstinence from opioids. Treatment dropouts are common. Naltrexone has been shown to be ineffective in preventing relapse when treatment retention rates are low and moderately effective when retention and medication adherence are adequate. Although the utility of naltrexone maintenance therapy is limited, some highly motivated patients— those with strong incentives to complete treatment—can successfully prevent relapse using naltrexone therapy (24). A recent systematic review also didn't find adequate evidence that allows the recommendation of oral naltrexone as maintenance treatment for opioid dependence (60).

2. Opioid withdrawal management (detoxification)

Opioid maintenance agonist treatment (OAT) is preferred instead of ultra-rapid and rapid detoxification using precipitated withdrawal. Accelerated detoxification, using opioid antagonists (with naltrexone, naloxone or both) at lower doses to shorten detoxification, should not be routinely offered. This requires high level of nursing and medical supervision because of increased severity of withdrawal symptoms and the risks associated with the increased use of adjunctive medications (45).

Rapid detoxification should only be considered for people who specifically request it, clearly understand the associated risks and are able to manage the adjunctive medication (45) (16). Medications used in opioid detoxification are open to risks of misuse, therefore monitoring of medication concordance and methods of limiting the risk of diversion where necessary, including supervised consumption is important (45).

Managing withdrawal symptoms during community detoxification should include (45):

- prior stabilisation of opioid use through pharmacological treatment
- effective coordination of care by specialist or competent primary practitioners
- the provision of psychosocial interventions, where appropriate, during the stabilisation and maintenance phases

Methadone or buprenorphine in detoxification?

Methadone^{note 8} or buprenorphine^{note 9} should be offered as the first-line treatment in opioid detoxification. There appears to be no significant difference between buprenorphine and methadone in terms of complication of medically supervised withdrawal, but withdrawal symptoms may resolve more quickly with buprenorphine possibly slightly higher rates of completion of withdrawal) (24) (61) (62).

When deciding between these medications, healthcare professionals should take into account: (45) (62)

- whether the service user is receiving maintenance treatment with methadone or buprenorphine; if so, opioid detoxification should normally be started with the same medication
- the preference of the service user

When determining the starting dose, duration and regimen (for example, linear or stepped) of opioid detoxification, healthcare professionals, in discussion with the service user, should take into account the (45):

- severity of dependence (particular caution should be exercised where there is uncertainty about dependence)
- stability of the service user (including polydrug and alcohol use, and co-morbid mental health problems)
- pharmacology of the chosen detoxification medication and any adjunctive medication
- setting in which detoxification is conducted

The duration of opioid detoxification should normally be up to 12 weeks in a community setting.

Alpha-2 adrenergic agonists

For the management of opioid withdrawal, tapered doses of opioid agonists should generally be used, although alpha-2 adrenergic agonists may also be used (47). The alpha2-adrenergic agonist clonidine (Catapresan®) is used widely as a non-opioid alternative for managing opioid withdrawal. The chances of completing withdrawal are similar with tapered doses of methadone, but people stay in treatment longer with methadone regimes. Clonidine has more adverse effects (low blood pressure, dizziness, dry mouth, lack of energy) than reducing doses of methadone (63).

To control the withdrawal symptoms of rapid opioid antagonist detoxification, alpha2-adrenergic agonists (clonidine or lofexidine) are sometimes used in combination, but causing minimal sedation. However there are insufficient data to determine whether opioid antagonists in combination with adrenergic agonists reduce the duration of withdrawal treatment or increase rates of transfer to maintenance treatment with an opioid antagonist (64).

Supportive care during detoxification

Persons considering opioid detoxification should be provided with information about self-help groups (such as 12-step groups in UK) and support groups (such as the Alliance in UK); the GP should consider facilitating engagement with such services (16).

Contingency management aimed at reducing illicit drug use should be considered both during detoxification and for up to 3–6 months after completion of detoxification (16, 45).

Prescribing adjunctive medications

Adjunctive medications are used to ameliorate symptoms of opioid withdrawal and are often used during detoxification (45).

When prescribing adjunctive medications during opioid detoxification, consider the following (45):

- only use them when clinically indicated, such as when agitation, nausea, insomnia, pain and/or diarrhoea are present
- use the minimum effective dosage and number of drugs needed to manage symptoms

- be alert to the risks of adjunctive medications, as well as interactions between them and with the opioid agonist.

It is recommended to be more careful with prescribing benzodiazepines for illicit drug users within a treatment of sleep and anxiety disorders. Don't give a long-term prescription (36). It is necessary to have an understanding of the use of benzo's (current and past) and the dependence on benzo's (36). The decision to start benzodiazepine use for a longer period must always be preceded by a comprehensive diagnostic assessment, is a well-considered decision and happens best in collaboration with a clinician specialized in addiction care (36).

Sometimes long-term prescription of benzodiazepines is necessary, in case of benzodiazepine dependency, to avoid withdrawal syndromes and/or to control the existing benzodiazepine use.

Also several patients with *psychological* problems and weak coping behaviour can benefit from long-term use of benzodiazepines, if no other psychotropic medication (antidepressants, neuroleptics) alone has the desired effect.

For pregnant women

Opiate-dependent women should be informed that neonates exposed to heroin, prescription opioids, methadone, or buprenorphine during pregnancy are monitored closely for symptoms and signs of neonatal withdrawal (neonatal abstinence syndrome) (44). Opioid detoxification should be reserved for selected women because of the high risk of relapse to opioids (44). Antenatal planning for intrapartum and postpartum analgesia may be offered for all women in consultation with appropriate health care providers (44). For more complicated cases (e.g., poor venous access, contraindications to epidural), referral to an anaesthesiologist should be arranged antenatally to discuss, in advance, alternatives for pain management.

Psychosocial interventions, when taken together, do not translate into better neonatal or obstetrical outcomes, nor are they associated with greater illicit drug abstinence among pregnant women. When contingency management is considered alone, there is an overall improvement in treatment retention (65).

Evidence

Buprenorphine has demonstrated greater efficacy in managing withdrawal symptoms and in completion of medically supervised withdrawal treatment in inpatient and outpatient settings compared to alpha2 adrenergic agonists (e.g. clonidine) in reducing the signs and symptoms of opioid withdrawal, retaining patients in withdrawal treatment, and supporting the completion of treatment (**Grade A**) (24, 61). Clonidine is not recommended (45). Buprenorphine and methadone appear to have equal efficacy in terms of completion of medically supervised withdrawal treatment. Systematic reviews also show that there appears to be no significant difference between buprenorphine and methadone in terms of complication of medically supervised withdrawal, but withdrawal symptoms may resolve more quickly with buprenorphine possibly slightly higher rates of completion of withdrawal. (**Grade A**) (24) (61) (62).

In addition, although efficacy is an important element in deciding the appropriate detoxification treatment other factors are also important, such as, whether the person is already maintained on buprenorphine or methadone. (62)

There is insufficient evidence for maintenance agonist treatment for opiate pregnant women. Based on the available evidence, no significant difference was found (66)

The present evidence suggests that contingency management strategies are effective in improving retention of pregnant women in illicit drug treatment programs as well as in transiently reducing illicit drug use. Overall the available evidence has low numbers and, therefore, it is impossible to accurately assess the effect of psychosocial interventions on obstetrical and neonatal outcomes (65)

Psychosocial treatments offered in addition to pharmacological opioid detoxification treatments are effective in terms of completion of treatment, use of opiate, participants abstinent at follow-up and clinical attendance (67). At present psychosocial treatments alone are not adequately proved treatment modalities or superior to any other type of treatment for opiate use disorders (68)

The current research demonstrates the overall effectiveness of CBT across adult alcohol- and other drug-use disorders. It may be particularly effective with marijuana-use disorders, with women, when combined with an additional psychosocial treatment, and when delivered in a brief format (53)

Management of other substances abuse

Management of stimulants abuse

A pharmacological agent with proven efficacy does not exist for treatment of cocaine and amphetamine abuse and dependence (69)

Psychosocial management, such as contingency management, CBT, behavioural couples therapy etc. should be considered (33).

Management of cannabis abuse

There is no clear conclusion but it appears that all psychotherapies tested (Cognitive-behavioral (CBT), motivational enhancement) have been demonstrated to be effective to reduce cannabis use delivered both in individual or group sessions (70)

Evidence

Although effective pharmacotherapy is available for heroin and alcohol dependence, none exists currently for cocaine dependence despite three decades of clinical trials on the efficacy of pharmacological and psychosocial interventions to treat this syndrome. Four Cochrane reviews have been published on the efficacy of antipsychotics, anticonvulsants, dopamine agonists and psychostimulants for cocaine dependence, but none of them found support for the efficacy of these treatments. Moreover, a Cochrane review assessing the efficacy and safety of disulfiram has shown low evidence supporting the clinical use of it for the treatment of cocaine dependence (71). Antidepressants cannot be considered a mainstay of treatment for unselected cocaine abusers/dependents (72).

Antipsychotic medications in the treatment of cocaine dependence seems not to be effective but there is limited evidence (69)

Fluoxetine, amlodipine, imipramine and desipramine have very limited benefits for amphetamine dependence and abuse. Fluoxetine may decrease craving in short-term treatment. Imipramine may increase duration of adherence to treatment in medium-term treatment. Apart from these, no other benefits can be found. This limited evidence suggests that no treatment has been demonstrated to be effective for the treatment of amphetamine dependence and abuse (73)

Follow-up and monitoring

Recommendations

Assess response to treatment and evaluate treatment plan. After treatment, follow-up of the person is recommended (24).

Information for practice

Re-evaluate treatment plan: Reassess response to treatment periodically and systematically, using standardized and valid instrument(s) whenever possible. Indicators of treatment response include ongoing substance use, craving, side effects of medication, emerging symptoms, etc. Consider obtaining biological markers of recent substance use.

Assess co-occurring medical problems associated with substance use through history, physical exam and appropriate laboratory evaluation (24)

For many patients, substance use disorders are chronic conditions that warrant extended efforts at relapse prevention and encouragement by multiple providers for progress.

Evidence

There is good evidence that aftercare (continuing care) following intensive addiction rehabilitation is associated with improved outcomes for substance use and psychosocial functioning. Common elements of aftercare include periodic contact with an addiction treatment professional (case management, group, individual or phone contact), active involvement in 12-step mutual help programs, and ongoing monitoring of indicators of substance use and/or its medical consequences (urine drug screens, liver function tests, etc.) (24)

Although there is no direct evidence that a written recovery plan improves outcome, this recommendation is based in part on regulatory requirements and in part on evidence from compliance with other medical and mental health treatment that clear written instructions and specific appointment times improve rates of follow-up.

Clinical question 7: What are the most effective methods for GPs and OPs to detect hypnotics and sedatives abuse among adult patients?

Who should be screened?

Recommendations

To detect abuse, the GP must be attentive for: (74)

- The risk for abuse with potential addictive medication, especially with high-risk patients. In these situations the GP should evaluate regularly the risk for addiction.
- Specific behaviours of patients that ask for exploring possible substance abuse.

All pregnant women and women of childbearing age should be screened periodically for prescription use **Grade 1A** (44).

Information for practice

Several factors can indicate the abuse of hypnotics and sedatives.

The GP must be attentive for persons-at-increased-risk, situations or pathologies, characteristics of the medication, characteristics of the patient or the physician-prescribers (74).

- Situations or pathologies: health problems that are the basis for the prescription and might lead to substance abuse are sleeping problems, psychiatric disorders, chronic pain or chronic somatic problems. Patients with chronic back pain and person who have a history of dependence are a population-at-risk.
- Analgesics are more likely to lead to addiction, followed by tranquilizers, stimulants and sedatives. Of these drugs, the ones with a fast and very strong effect (like hydrocodone, oxycodone, alprazolam) are the most common to lead to dependence.
- The 'Controlled Substances Act' (US) ordered drugs based on their addiction potential (see table 1 appendix 3).
- Several characteristics of patients are described which lead to more substance abuse. However they are not based on evidence. E.g. Patients who are more concerned with their medication than with their pain complaint, patients who mention to have side effects for medications with less potential abuse, patients who don't want to use generics, patients who refuse any additional examination or consultation, patients who know a lot about the medication, patients who lost their prescription, patients who declare that the physician is the only person who can help them.
- Patients with a psychiatric disorder, but the use of medication are mostly due of the psychiatric condition. (74)
- The American Medical Association describes 4 reasons ('the four Ds': Dated, Duped, Dishonest and Disabled) that encourage a physician to prescribe too much medication than the patient needs (74). 'Dated' means the use of older inappropriate pharmaceutical products. 'Duped' stands for physicians who are convinced to perform in the best way to be patient-centred. 'Dishonest' are corrupting physicians. 'Disabled' are physicians with personal psychiatric problems.

Evidence

Studies show evidence for the prevalence of abuse in persons at risk. In a study population being treated with opiates, 5 to 24% demonstrated deviant use behaviour. Of the patients with chronic back pain, treated with opiates, 36 to 56% had a personal history of medication abuse.

A study, comparing the addiction risk of tramadol with a non-steroidal anti-inflammatory drugs (NSAID) and hydrocone, showed a lower abuse percentage with NSAID and tramadol (2,5% and 2,7% in 12 months of use) vs. hydrocodone (4,9%) in a predominant female population. However the chance of abuse with tramadol is certain (74)

Tools to detect abuse

Recommendations

Identification of risk patients with the TICS test **Grade 1C** (74).

When testing for substance use is clinically indicated for pregnant women, urine drug screening is the preferred method **Grade 2A** (44).

Information for practice

TICs test

The test Two-Item Conjoint screening (TICs) consists of 2 questions:

‘Did you use the previous year more (alcoholic drinks) or medication that you wanted?’ and ‘Did you feel during the previous year the desire of the need to stop drinking and/or take medications’. This test is easy to complete.

The diagnostic criteria of substance dependence, substance abuse, substance intoxication, and withdrawal are established in DSM-IV (and the CIM-10 in case of substance dependence) (74).

Pregnant women

Informed consent should be obtained from the woman before maternal drug toxicology testing is ordered (44). Policies and legal requirements with respect to drug testing of newborns may vary by jurisdiction, and caregivers should be familiar with the regulations in their region (44).

Evidence

The Two-Item Conjoint Screening (TICS) test, detecting abuse or dependence of alcohol or another substance, was evaluated with 434 patients between 18 and 59 years old in first line health care. The absence of a positive answer indicates a risk on substance abuse problem of 7,4%, a positive answer 45% and two positive answers 75%. Several GPs were consulted and argued that this test is feasible and easy to remember and use (74). However no study for validation and use in general practices in Belgium is known.

Other tests are less valid. The Screening Tool for Addiction Risk (STAR) is a questionnaire for self-assessment. This test seems not useful for GP, but invites to be careful with smokers and alcoholics (active or ex-) to prescribe them medications. The Screener and Opioid Assessment for Patients with Pain (SOAPP) was evaluated with patients with chronic pain treated long with opiates. This test must be still validated with other populations. For the CAGE test, insufficient evidence exists to recommend it (74).

Clinical question 8: What are the most effective models for referral and collaboration between GPs, OPs, and specialized centres/psychotherapists on hypnotics and sedatives abuse?

Recommendations

Depending on his competences, the GP should ask for help of a (team of) clinician(s) specialized in the treatment of patients with substance abuse. Psychosocial assistance offers usually more help. If the patient takes the drugs because of pain, advice can be asked from the pain center (74).

Consider seeking specialist advice or referral to a specialist center for people with: (75)

- A history of alcohol or other drug use or dependence.
- Concurrent, severe medical or psychiatric disorder or personality disorder.
- A history of drug withdrawal seizures — these generally occur in people who suddenly stop high doses of the drugs. Slow tapering is recommended for these individuals.

For the support and orientation of the patient, collaboration between pharmacists and healthcare professionals within the care network is useful **Grade 1C** (74).

Evidence

These recommendations are in line with published reviews and guidelines on managing benzodiazepine dependence and are based on expert opinion (75). There is limited evidence to support the use of adjunct psychotherapy to promote benzodiazepine withdrawal.

Clinical question 9: What are the most effective methods for GPs and OPs to manage hypnotics and sedatives abuse among adult patients?

Background

The following recommendations concern treatment of benzodiazepines and z-drugs dependency, since guidelines on other sedatives and hypnotics were not retrieved.

Guidelines recommend preventing benzodiazepine abuse in the first place and argue that quitting of benzodiazepines is very difficult.

Assessment and treatment plan

Recommendations

Prior to the treatment, an assessment is advised. **No grade** (75).

Consider whether the withdrawal of the benzodiazepine or z-drug can be appropriately managed in primary care:

- They are willing, committed, and compliant, and have adequate social support.
- They have no previous history of complicated drug withdrawal.
- They are able to attend regular reviews. (75)

Information for Practice

Assess whether this is a suitable time for the person to stop taking the drugs. In some circumstances it may be more appropriate to wait until other problems are resolved or improved before starting drug withdrawal. Enquire about: symptoms of depression, symptoms of anxiety, Symptoms of long-term insomnia, any medical problems and whether these are well controlled and stable

Steps in the anamnesis process: (74)

- 1) Reason for consultation
- 2) Current and past use of medication (start of the use, frequency, kind and dose, awareness of overdosing, periods of abstinence etc.)
- 3) Medical data related to abuse: hepatitis, HIV-status, smear, last menstruation
- 4) Psychological health: psychiatric disorders, depression
- 5) Social situation: family, work, social environment, financial situation etc.
- 6) Antecedent of treatment before addiction

The GP can explore in addition the level of motivation to stop, conduct a clinical examination, clinical signs of intoxication or withdrawal, evaluation of psychological health and complications.

Evidence

These recommendations are based on published reviews and guidelines on managing benzodiazepine dependence and are based on expert opinion (75-80).

Which interventions are effective?

Recommendations

Option 1: Minimal intervention

Start with a minimal intervention i.e. providing information through a stop letter and the advice to stop the use of benzodiazepines. If the patient doesn't succeed in this way, a gradual dose reduction is recommended. **No grade (81), Grade B (82).**

Option 2: Dose reduction

Decide if the person can stop their current benzodiazepine or z-drug without changing to diazepam.

Withdrawal should be gradual (dose tapering, such as 5–10% reduction every 1–2 weeks, or an eighth of the dose fortnightly, with a slower reduction at lower doses), and titrated according to the severity of withdrawal symptoms **Grade 1A (74), (24), (36), (82).**

Manage withdrawal symptoms. Advise that drug withdrawal should be gradual to minimize the risk of withdrawal effects. Manage anxiety, depression and insomnia.

Information for practice

Option 1: Minimal intervention strategy

The GP intends to help the patient stop through a minimal intervention strategy. The patient receives advice to stop through a letter with practical indications. One out of 8 patients succeed to stop in this way. The practice supporter/nurse can play an important role through the collaboration with the pharmacist in applying this method by systematically detecting chronic benzodiazepine users and send them the letter (81). One barrier is the attitude of the GP: they suppose it is not realistic to send out a letter, however one study proves the feasibility in Belgium (74).

Option 2: Dose reduction

If this doesn't succeed, the other option is controlled dose reduction. This can be done through switching to diazepam, or without switching. There is conflicting evidence for switching the benzodiazepine to a longer-acting one.

General considerations

Offer reassurance that the person will be in control of the drug withdrawal and that they can proceed at a rate that suits them. Drug withdrawal may take 3 months to a year or longer if necessary. Some people may be able to withdraw in less time (75). If the person reaches a difficult point in the drug withdrawal schedule, maintain the current dose for a few weeks if necessary. Try to avoid going backwards and increasing the dosage again if possible. Stopping the last few milligrams is often seen as being particularly difficult.

The participation of GPs in a training on dependence problems increases the number of detection-interventions, but also the referrals of diagnosed patients for an appropriate treatment (**Grade 1C**) (74).

a) Switching to diazepam

Switching to diazepam is recommended for:

- People using the short-acting potent benzodiazepines (that is, alprazolam and lorazepam).
- People using preparations that do not easily allow for small reductions in dose (that is alprazolam, flurazepam, loprazolam and lormetazepam).

- People taking temazepam or nitrazepam who choose to withdraw from diazepam after discussing the advantages and disadvantages.
- People experiencing difficulty or who are likely to experience difficulty withdrawing directly from temazepam, nitrazepam, or z-drugs, due to a high degree of dependency (associated with long duration of treatment, high doses, and a history of anxiety problems).

The short-life benzodiazepine is substituted by a long-life diazepam. A good help is the table with the equivalent doses (table 1 (81), see appendix 3). The dose of diazepam will be reduced every week with 25%. Prescribing tablets of 2mg, simplifies the dose reduction. The GP informs the patient about the expected withdrawal symptoms, similar to the original complaints. A gradual reduction in 10 weeks is recommended. The addition of a medication (propranolol, dothiepin, buspiron, progesteron, or hydroxyzine) is not recommended (74).

Exact dose substitution is not possible, due to differences in potency between different benzodiazepines and z-drugs and wide variation in the half-life and response to these drugs (such as the degree of sedation) between different individuals (for example, the elderly and people with hepatic impairment).

Consequently, a complete dose substitution may not always be required, depending on the individual response (to avoid excessive sedation).

Switching to diazepam is best carried out gradually, usually in a stepwise fashion.

Consider making the first switch in the nighttime dose to avoid daytime sedation.

Dose withdrawal may be started when conversion to diazepam is complete (75)

For withdrawal schedules, see <http://www.benzo.org.uk/manual/bzsched.htm> (83)

b) Without switching to diazepam

In an ambulatory setting, a flexible dose scheme can be appropriate (adapted to individual needs)) (36). Negotiate a gradual drug withdrawal schedule (dose tapering) that is flexible. Be guided by the person in making adjustments so that they remain comfortable with the withdrawal (75). Withdrawal should be gradual (dose tapering, such as 5–10% reduction every 1–2 weeks, or an eighth of the dose fortnightly, with a slower reduction at lower doses), and titrated according to the severity of withdrawal symptoms (75).

In case of high tolerance, where doses higher than the equivalent of 30mg diazepam are required to suppress the withdrawal symptoms, it can be indicated to execute the first withdrawal phase in a residential setting (36).

Contingency management seems to work effectively as a support for benzodiazepine withdrawal (36). Additional psychological therapies do not appear to increase effectiveness of graded discontinuation but should be considered on their own merits (82)

For stopping with antidepressants, experts recommend gradual stopping (no evidence available). No evidence exists for stopping with antipsychotics (74)

Managing withdrawal symptoms

Carbamazepine may be used instead of benzodiazepines to control withdrawal symptoms from high doses of benzodiazepines (**Grade C**) (82) (**Grade A**) (74)

Review frequently to detect and manage problems early, and to provide encouragement and reassurance during and after drug withdrawal.

Manage anxiety:

Explain that anxiety is the most common acute withdrawal symptom.

- Reassure that anxiety is likely to be temporary.
- Consider slowing or suspending withdrawal until symptoms become manageable.
- Consider additional use of non-drug treatments.
- Adjunct drug therapy should not be routinely prescribed but may be considered: Propranolol: for severe, physical symptoms of anxiety (such as palpitations, tremor, and sweating) only if other measures fail. Antidepressants: only if depression or panic disorder coexist or emerge during drug withdrawal. Do not prescribe antipsychotics which may aggravate withdrawal symptoms.
- Seek specialist advice if symptoms are severe or difficult to manage.

Manage depression:

- If depression emerges or coexists with withdrawal symptoms: Consider suspending drug withdrawal until the depression resolves.

Manage insomnia:

- Adverse effects on sleep are not likely to be a problem if drug withdrawal is slow.
- Non-drug treatments have proved to be beneficial in managing long-term insomnia and should be considered for all people with long-term insomnia problems

If the person doesn't want to stop

Do not pressurize the person to stop if they are not motivated to do so. Listen to the person, and address any concerns they have about stopping. Discuss the benefits of stopping the drug. Review at a later date if appropriate, and reassess the person's motivation to stop. In people who remain concerned about stopping treatment despite explanation and reassurance, persuading them to try a small reduction in dose may help them realize that their concerns are unfounded (75).

Evidence

*Sending out a letter by the GP (advice to stop and proposal for a consultation) to prolonged benzodiazepine users, is effective in the reduction of the number of daily prescribed doses and the number of patients that takes benzodiazepines (**Grade B**) (74) (84). Sending out a memory letter doesn't add a benefit (**Grade B**) (74)). For most people in primary care setting, even a minimal intervention, such as a letter with an information sheet or a single brief consultation, can be effective in reducing or stopping benzodiazepine use without adverse effects (75) (84).*

Gradual tapering is recommended instead of abrupt discontinuation (85).

Follow-up and monitoring

Recommendations

Review frequently, to detect and manage problems early and to provide advice and encouragement during and after the drug withdrawal.

If they did not succeed on their first attempt, encourage the person to try again. (75), (24).

Information for practice

Re-evaluate treatment plan: Reassess response to treatment periodically and systematically, using standardized and validated instruments whenever possible. Indicators of treatment response include ongoing substance use, craving, side effects of medication, emerging symptoms, etc. Consider obtaining biological markers of recent substance use. Assess co-occurring medical problems associated with substance use through history, physical exam and appropriate laboratory evaluation (24).

Provide information on withdrawal symptoms (75).

Evidence

There is good evidence that aftercare (continuing care) following intensive addiction rehabilitation is associated with improved outcomes for substance use and psychosocial functioning. Common elements of aftercare include periodic contact with an addiction treatment professional (case management, group, individual or phone contact), active involvement in 12-step mutual help programs, and ongoing monitoring of indicators of substance use and/or its medical consequences (urine drug screens, liver function tests, etc.) (24).

Notes

Note 1

AUDIT consists of three questions on alcohol consumption (AUDIT-C), 4 on alcohol related problems and 3 on dependency symptoms. The answers receive a score from 0 to 4. The answer most on the left side (possible answers are presented horizontally) is score 0 and the more right is score 4. Question 9 and 10 have a different scoring method. The left answer gets 0, the middle 2 and the right 4. Below the scores are counted. This score lies between 0 and 40 and determines the further treatment strategy. The AUDIT can be completed in the waiting room, during the consultation, at home by the patient or through an online application. Interpretation of AUDIT scores (14):

- Low-risk drinking: score of 1–7
- Hazardous drinking: score of 8–15.
- Harmful drinking: score of 16–19.
- Possible alcohol dependence: score of 20 or more.

Note 2

The T-ACE (Tolerance, Annoyed, Cut down, Eye-opener) is the first validated screening questionnaire for risky drinking developed for pregnant women. Any woman who answers “more than two drinks” on the tolerance question, “How many drinks does it take to make you feel high?” is scored 2 points. Each “yes” to the additional 3 questions scores 1 point. A score of 2 or more out of 5 indicates risk of a drinking problem, and the woman should be referred for further assessment.

The TWEAK (Tolerance, Worry, Eye-opener, Amnesia, Cut down) is a 5-item screening tool that combines questions from other tests including MAST, CAGE, and T-ACE that were found to be effective in identifying at-risk drinkers. These questions address tolerance, feeling the need to cut down on drinking, and having close friends or relatives worry or complain about the drinking. On the tolerance question, 2 points are given if a woman reports that she can consume more than 5 drinks without falling asleep or passing out (“hold version”) or reports that she needs 3 or more drinks to feel the effect of alcohol (“high version”). A positive response to the worry question yields 2 points and positive responses to the last 3 questions yield 1 point each. Scored on a 7-point scale, a woman who has a total score of 2 or more points is likely to be an at-risk drinker.

Note 3

Patients presenting in crisis may place the primary care team in difficult situations. There is no evidence on how best to approach these encounters. This section discusses some possible common sense solutions (13).

- Suicidal threats or demands for immediate but undefined help require assessment, preferably within the surgery or by the out-of-hours service. Listening to the patients’ concerns may help to alleviate the pressure on the healthcare professional to take additional action. Immediate admission is rarely indicated or possible but if suicidal ideation persists it may be needed, in which case referral to psychiatric services is appropriate.

- Physically threatening behaviour should be dealt with by calling the police. Drunk patients should be listened to politely and with courtesy, as showing frustration may inflame the situation. The patient may respond to being listened to politely and may be gently encouraged to go home. Drunk patients on the telephone can be disruptive to surgery function and also out-of-hours services as they may block the line. Having given due consideration and advice on who to contact when the patient is sober, it may be appropriate to terminate the call. At times, it may be quicker to see these patients.

Community management of patients with organic brain damage can be difficult. They often do not attend appointments. The community nursing team may be able to offer advice and support to the patient. A community care assessment by the social work department may be needed. If drinking continues to be problematic, sometimes patients will agree to an arrangement with their family or their social worker such that, at any one time, they only have access to small amounts of their money.

Note 4

Behavioural self-management (controlled drinking program) can be recommended as a treatment strategy for people with no or low level dependence and for when patient and clinician agree that moderation is an appropriate goal (**grade A (21)**). Coping skills training is recommended for people who appear to lack the relevant skills to achieve and remain abstinent (**grade A (21)**).

Cognitive behavioural therapy has more effect than a standard therapy, mostly counselling + practical help (**Grade 1 (6)**) Only relevant for GP if he is trained. There exist several forms of cognitive behavioural therapy such as coping skills, cue exposure and behavioural couple therapy and must be offered by specific trained specialists (**Grade A (21)**). Cognitive Behavioural treatment is effective when delivered in a brief format (53).

Note 5

Excessive alcohol use might be related to thiamine or vitamin-B1 deficit. Therefore thiamine must be provided in severe alcohol abuse. During withdrawal a vitamin B1 deficit may lead to bleedings in the brains with irreversible damage.

Note 6

The Clinical Institute Withdrawal Assessment for Alcohol (CIWA-Ar) is a questionnaire for mapping and scoring withdrawal symptoms. The list identifies ten mostly occurring symptoms: nausea and vomiting, shaking, sweating, anxiety, agitation, tactile disorders, auditory disorders, visual disorders, headache, disorientation. A score between 0 and 9 indicates minimal or no withdrawal symptoms, while a score between 10 and 19 indicates mild to moderate symptoms. Higher than 20 suggests severe withdrawal symptoms (6).

Note 7

While a fair amount of work has been completed since 1996 on the development and assessment of standardized instruments for screening for drug use and misuse, several studies were considered to be of only fair quality, due to small patient sample size or the failure to include within the sample patients from a general clinic or practice population. A few studies focusing on the accuracy (sensitivity and specificity) of an instrument were considered of only fair quality since they used some other validated instrument (e.g., POSIT) as their reference standard rather than a structured diagnostic interview. There was fair evidence of accuracy and good evidence of reliability of ASSIST; Sensitivity 90%, specificity 78%. The study population was too small (n=150) and there was no confidence interval or internal consistency mentioned. *Newcombe DL, Humeniuk RE, Ali R. Validation of the World Health Organization Alcohol, Smoking and Substance Involvement Screening Test (ASSIST): report of results from the Australian site. Drug Alcohol Review. 2005;24:217–226.*

This review was limited to questionnaires considered brief enough to be potentially useful for screening for drug use/misuse in the primary care setting. Toward this end, we set an arbitrary upper limit of 20 items and/or 5 minutes for administration/scoring of the instrument. When assessed, the Drug Abuse Screening Test (DAST), the longest of the instruments considered in this review, was shown to be an accurate and reliable test. The sensitivity and/or specificity of instruments consisting of six or fewer items were lower, though still

acceptable. Further testing is needed to determine the optimal tradeoff between questionnaire length and accuracy/reliability of the instrument.

It has yet to be shown how well some of these instruments perform in screening large populations of patients in general medical clinics or practices, where a lower prevalence of drug misuse problems can be expected. For the CAGE-AID, CRAFFT, DAST and RAFFT, more than one published study provided calculations of the instrument's predictive value. Negative predictive values of greater than 90% were noted consistently for each instrument except the RAFFT, which had a NPV of 51–87%. However, more than two-fold variations in positive predictive value were noted between studies of the CAGE-AID, CRAFFT and DAST. Studies reporting the lower PPVs (<30%) were typically conducted among more general, non-selected patient populations in which a lower prevalence of drug problems can be expected. The positive and negative predictive values of ASSIST were not reported in published studies assessing this test.

The greatest gap in the evidence noticed in this review was the lack of studies that shed light on the feasibility and usefulness of applying screening instruments within a busy practice. Debriefing interviews conducted at the end of the initial testing of ASSIST (1) measured clarity, ease of use, and potential response bias, but the clinical utility of this or other instruments in an actual practice setting has yet to be assessed. In addition to data on rates of offering and completing the screens, qualitative data are needed on the acceptability of the additional burden placed on patients, clinicians, and staff when the test is used routinely in practice. (43).

Note 8

Specific recommendations for withdrawal using methadone:

- a) Initial stabilization is accomplished via induction with methadone just as it would be for maintenance with this agent. Withdrawal signs do not have to be observed prior to starting methadone, but with methadone there is risk of medication accumulation, toxicity, and overdose. Initial dosing should be very conservative with careful daily observation of the patient. Initial daily doses can range from 5 mg to a maximum of 30 mg
- b) Within days to weeks, a daily dose of methadone should be achieved that eliminates signs and symptoms of opioid withdrawal, suppresses opioid craving, and eliminates illicit opioid use. This dose could range from 30 mg per day to doses as high as 120 mg per day
- c) Once stabilization has been achieved, the dose can be gradually tapered over a period of weeks to months. Dose decreases of more than 5 -10 mg/day of methadone are generally poorly tolerated. [C] In contrast to the evidence with buprenorphine/naloxone, with methadone, longer taper periods should be used in the outpatient setting to minimize patient discomfort and maximize chances of success
- d) A period of two to three weeks is generally sufficient for short-term outpatient medically supervised withdrawal in the most stable and motivated individual. The higher the stabilization dose, the longer the taper is likely to take. The taper should proceed more gradually as the dose becomes lower (24)

Note 9

Specific recommendations for withdrawal using buprenorphine/naloxone:

- a) Initial stabilization is accomplished via induction with buprenorphine/naloxone just as it would be for maintenance with this agent (See Table S-1). To reduce the risk of precipitated withdrawal, the patient must be in sufficient opioid withdrawal to be manifesting objective signs of withdrawal prior to starting buprenorphine/naloxone usually at least 8 hours since the patient's last use of heroin or other short-acting opioid or at least 24 and preferably at least 48 hours have elapsed since the last use of methadone or other long-acting opioid

b) Within 1-3 days, a daily dose of buprenorphine/naloxone should be achieved that eliminates signs and symptoms of opioid withdrawal, suppresses opioid craving, and eliminates illicit opioid use. This dose could range from 2/0.5 mg per day to 16/4mg per day and would rarely exceed that amount

c) Once stabilization has been achieved the dose can be rapidly tapered over 5-7 days. There is little evidence that prolonging the taper leads to better results. (If the patient and physician prefer a longer taper, there is also no evidence that a longer taper is harmful) (24)

References

1. Gisle L, Hesse E, Drieskens S, Demarest S, Van der Heyden J, Tafforeau J. Gezondheidsenquête België, 2008. Rapport II - Leefstijl en Preventie. Brussel: Wetenschappelijk Instituut Volksgezondheid; 2010 [cited 2012 18 september]; Available from: <https://www.wiv-isp.be/epidemiologie/epinl/index4.htm>.
2. Substance Abuse and Mental Health Services Administration. Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings. NSDUH Series H-41, HHS Publication No. (SMA) 11-4658. Rockville, MD: SAMHSA, 2011.
3. International Labour Office. Alcohol and drug problems at work: The shift to prevention. Geneva: International Labour Organization; 2003.
4. Securex. Het alcoholgebruik van de Belgische werknemer. Securex, 2008.
5. Lambert SD. The role of the occupational physician in substance abuse. *Occup Med.* 2002;17(1):1-12.
6. Landelijke Stuurgroep Multidisciplinaire Richtlijnontwikkeling in de GGZ Multidisciplinaire Richtlijn Stoornissen in het gebruik van alcohol. Richtlijn voor de diagnostiek en behandeling van volwassen patiënten met een stoornis in het gebruik van alcohol. Utrecht: Trimbos Instituut; 2009.
7. Beaumont DG. The interaction between general practitioners and occupational health professionals in relation to rehabilitation for work: a Delphi study. *Occup Med.* 2003;S3:249–53.
8. The ADAPTE Collaboration. Manual for Guideline Adaptation. Version 1.0. 2007 [cited 2012 5 March]; Available from: <http://www.adapte.org/www/upload/actualite/pdf/Manual%20&%20Toolkit.pdf>.
9. The AGREE Collaboration. Appraisal of Guidelines for Research and Evaluation II. 2009.
10. Scottish Intercollegiate Guidelines Network (SIGN). Methodology checklist 1: systematic reviews and meta-analyses. Available from: <http://www.sign.ac.uk/guidelines/fulltext/50/checklist1.html>.
11. Webb G, Shakeshaft A, Sanson-Fisher R, Havard A. A systematic review of work-place interventions for alcohol-related problems. *Addiction.* 2009;104:365–77.
12. Alonso-Coello P, Irfan A, Sol`a I, Gich I, Delgado-Noguera M, Rigau D, et al. The quality of clinical practice guidelines over the last two decades: a systematic review of guideline appraisal studies. *Qual Saf Health Care* 2010;19:e58.
13. Scottish Intercollegiate Guidelines Network (SIGN). The management of harmful drinking and alcohol dependence in primary care. A national clinical guideline. Edinburgh (Scotland): Scottish Intercollegiate Guidelines Network (SIGN); 2003.
14. SCHIN - Sowerby Centre for Health Informatics at Newcastle. Alcohol - problem drinking (Prodigy). [Guideline] 2010 [updated 01.12.2011]; Available from: http://prodigy.clarity.co.uk/alcohol_problem_drinking.
15. Sweetman SC (Ed.). Martindale: the complete drug reference. 34th edn ed. London: Pharmaceutical Press; 2005.

16. SCHIN - Sowerby Centre for Health Informatics at Newcastle. Opioid dependence (Prodigy). [Guideline] 2008 [updated 01.10.2011]; Available from: http://prodigy.clarity.co.uk/opioid_dependence.
17. J. Michels SH, G. Dom, M. Goossens, G. Van Hal, P. Van Royen. Problematisch alcoholgebruik. Aanpak door de huisarts. Gevalideerd door CEBAM in februari 2011. 2011.
18. NICE - National Institute for Health + Clinical Excellence. Alcohol-use disorders: preventing the development of hazardous and harmful drinking (PH 24). London: National Institute for Health and Clinical Excellence 2010; Available from: <http://guidance.nice.org.uk/PH24>.
19. Meerkerk GJ, Aarns T, Dijkstra RH, Weisscher P, Njoo K, Boomsma LJ. Problematisch alcoholgebruik (M10). Huisarts Wet 2005;48(6):284-85.
20. Carson G, Vitale Cox L, Crane J, Croteau P, Graves L, Kluka S, et al. SOCG Clinical practice guideline: Alcohol Use and Pregnancy Consensus Clinical Guidelines. No 245. Journal of Obstetrics and Gynaecology Canada. 2010;32(8).
21. Australian Government Department of Health and Ageing. Guidelines for the treatment of alcohol problems. 2009.
22. Cashman CM, Ruotsalainen JH, Greiner BA, Beirne PV, Verbeek JH. Alcohol and drug screening of occupational drivers for preventing injury. Cochrane Database Syst Rev. 2009;2(CD006566).
23. Raistrick D, Heather N, Godfrey C. Review of the Effectiveness of Treatment for Alcohol Problems. London: National Treatment Agency for Substance Misuse, 2006.
24. VA/DoD - Department of Veteran Affairs DoD. clinical practice guideline for management of substance use disorders (SUD). Washington (DC): Department of Veteran Affairs, Department of Defense; 2009. p. 158 p.
25. NICE - National Institute for Health + Clinical Excellence. Alcohol-use disorders. Diagnosis, assessment and management of harmful drinking and alcohol dependence (CG 115). London: National Institute for Health and Clinical Excellence 2011; Available from: <http://www.nice.org.uk/CG115>.
26. World Health Organization. The ICD-10 Classification of Mental and Behavioural Disorders. Geneva: WHO, 1993.
27. Burns E, Gray R, Smith LA. Brief screening questionnaires to identify problem drinking during pregnancy: a systematic review. Addiction. 2010;105:601-14.
28. Cremonte M, Ledesma RD, Cherpitel CJ, Borges G. Psychometric properties of alcohol screening tests in the emergency department in Argentina, Mexico and the United States. Addict Behav. 2010;35(9):818-25.
29. Saunders JB, Aasland OG, Babor TF. Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption-II. Addiction. 1993;88:791-804.
30. Gache P, Michaud P, Landry U, Accietto C, Arfaoui S, Wenger O, et al. The Alcohol Use Disorders Identification Test (AUDIT) as a screening tool for excessive drinking in primary care: reliability and validity of a French version. Alcohol Clin Exp Res. 2005;29(11):2001-7.

31. Aertgeerts B, Buntinx F, Ansoms S, Fevery J. Screening properties of questionnaires and laboratory tests for the detection of alcohol abuse or dependence in a general practice population. *Br J Gen Pract.* 2001;51(464):206-17.
32. NHG - Dutch College of General Practitioners. Stoornissen in het gebruik van alcohol (Landelijke Eerstelijns Samenwerkings Afspraken). [Guideline] 2010; Available from: <http://nhg.artsennet.nl/web/file?uuid=11e6873f-b30d-496f-b7de-25d16fd051a4&owner=40b26d44-3397-4e5b-8e84-5be19f29449d>.
33. NICE - National Institute for Health + Clinical Excellence. Drug misuse: psychosocial interventions (CG51). [Guideline] 2007; Available from: <http://guidance.nice.org.uk/CG51>.
34. Coulton S. Alcohol Misuse. *clinical evidence.* 2011;03:1017.
35. Smedslund G, Berg RC, Hammerstrøm KT, Steiro A, Leiknes KA, Dahl HM, et al. Motivational interviewing for substance abuse. *Cochrane Database of Systematic Reviews.* 2011;Issue 5. Art. No.: CD008063. DOI: 10.1002/14651858.CD008063.pub2.
36. VAD - Vereniging voor Alcohol- en andere Drugproblemen. Richtlijnen bij het voorschrijven van benzodiazepines aan illegale druggebruikers. Belgium2008.
37. Smith EJ, Lui S, M T. Pharmacologic Interventions for Pregnant Women Enrolled in Alcohol Treatment. *Cochrane Database of Systematic Reviews* 2009;Issue 3. Art. No.: CD007361. DOI: 10.1002/14651858.CD007361.pub2.
38. Amato L, Minozzi S, Davoli M. Efficacy and safety of pharmacological interventions for the treatment of the Alcohol Withdrawal Syndrome. *Cochrane Database of Systematic Reviews.* 2011;Issue 6. Art. No.: CD008537. DOI: 10.1002/14651858.CD008537.pub2.
39. Leone MA, Vigna-Taglianti F, Avanzi G, Brambilla R, Faggiano F. Gamma-hydroxybutyrate (GHB) for treatment of alcohol withdrawal and prevention of relapses. *Cochrane Database of Systematic Reviews.* 2011;Issue 4.
40. Minozzi S, Amato L, Vecchi S, Davoli M. Anticonvulsants for alcohol withdrawal. *Cochrane Database of Systematic Reviews.* 2010;Issue 3. Art. No.: CD005064. DOI: 10.1002/14651858.CD005064.pub3.
41. Koeter MWJ, van den Brink W, Lehert P. Effect of early and late compliance on the effectiveness of acamprosate in the treatment of alcohol dependence. *Journal of Substance Abuse Treatment.* 2010;39:218–26.
42. Jørgensen CH, Pedersen B, Tønnesen H. The Efficacy of Disulfiram for the Treatment of Alcohol Use Disorder. *Alcohol Clin Exp Res.* 2011;35(10):1749–58.
43. AHRQ - Agency for Healthcare Research + Quality. Screening for illicit drug use: U.S. Preventive Services Task Force recommendation statement. U.S. Preventive Services Task Force. NGC:006245. [Guideline Clearing Report] 2008; Available from: http://www.guideline.gov/summary/summary.aspx?doc_id=12148&nbr=6245.

44. AHRQ - Agency for Healthcare Research + Quality. Substance use in pregnancy. Society of Obstetricians and Gynaecologists of Canada. NGC:008510. [Guideline Clearing Report] 2011; Available from: <http://www.guideline.gov/content.aspx?id=33136>.
45. NICE - National Institute for Health + Clinical Excellence. Drug misuse: opioid detoxification (CG52). [Guideline] 2007; Available from: <http://guidance.nice.org.uk/CG52>.
46. Claessens J, Defillet T. Screenen met de Assist in de eerstelijnswelzijnssector. Brussels: VAD; 2010 [cited 2012 7 december]; Available from: http://www.vad.be/media/609165/handleiding%20assist_welzijnswerk_finaal.pdf.
47. World Health Organisation. Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence. Switzerland 2009.
48. Day E, Ison J, Strang J. Inpatient versus other settings for detoxification for opioid dependence. Cochrane Database of Systematic Reviews. 2008; Issue 4.
49. Administrations DaD. Drug misuse and dependence: UK guidelines on clinical management. England: Department of Health, 2007.
50. Excellence N-NiFHC. Psychosis with coexisting substance misuse. Assessment and management in adults and young people. National Institute for Health and Clinical Excellence, 2011.
51. RCGP. Guidance for hepatitis A and B vaccination of drug users in primary care and criteria for audit. Royal College of General Practitioners, 2005.
52. Asbridge M, Hayden JA, Cartwright JL. Acute cannabis consumption and motor vehicle collision risk: systematic review of observational studies and meta-analysis. *BMJ*. 2012;344:e536.
53. Magill M, Ray LA. Cognitive-Behavioral Treatment With Adult Alcohol and Illicit Drug Users: A Meta-Analysis of Randomized Controlled Trials. *Journal of Studies on Alcohol and Drugs* 2009;70(4):516-27.
54. Fareed A, Vayalapalli S, Casarella J, Drexler K. Effect of Buprenorphine Dose on Treatment Outcome. *Journal of Addictive Diseases*. 2011;31(1):8-18.
55. Amato L, Minozzi S, Davoli M, Vecchi S. Psychosocial combined with agonist maintenance treatments versus agonist maintenance treatments alone for treatment of opioid dependence. *Cochrane Database of Systematic Reviews*. 2011; Issue 10. Art. No.: CD004147. DOI: 10.1002/14651858.CD004147.pub4.
56. Lobmaier P, Kornor H, Kunoe N, Bjørndal A. Sustained-Release Naltrexone For Opioid Dependence. *Cochrane Database of Systematic Reviews*. 2008; Issue 2. Art. No.: CD006140. DOI: 10.1002/14651858.CD006140.pub2.
57. Mattick RP, Breen C, Kimber J, Davoli M. Methadone maintenance therapy versus no opioid replacement therapy for opioid dependence. *Cochrane Database of Systematic Reviews*. 2009; Issue 3. Art. No.: CD002209. DOI: 10.1002/14651858.CD002209.pub2.

58. Faggiano F, Vigna-Taglianti F, Versino E, Lemma P. Methadone maintenance at different dosages for opioid dependence. *Cochrane Database of Systematic Reviews*. 2008;Issue 3. Art. No.: CD002208. DOI: 10.1002/14651858.CD002208.
59. Jegu J, Gallini A, Soler P, Montastruc J, Lapeyre-Mestre M. Slow-release oral morphine for opioid maintenance treatment: a systematic review. *British Journal of Clinical Pharmacology*. 2011;71(6):832-43.
60. Minozzi S, Amato L, Vecchi S, Davoli M, Kirchmayer U, Verster A. Oral naltrexone maintenance treatment for opioid dependence. *Cochrane Database of Systematic Reviews*. 2011;Issue 4. Art. No.: CD001333. DOI: 10.1002/14651858.CD001333.pub4.
61. Gowing L, Ali R, White JM. Buprenorphine for the management of opioid withdrawal. *Cochrane Database of Systematic Reviews*. 2009;Issue 3. Art. No.: CD002025. DOI: 10.1002/14651858.CD002025.pub4.
62. Meader N. A comparison of methadone, buprenorphine and alpha2 adrenergic agonists for opioid detoxification: A mixed treatment comparison meta-analysis *Drug and Alcohol Dependence*. 2010;108:110-4.
63. Gowing L, Farrell M, Ali R, White JM. Alpha2-adrenergic agonists for the management of opioid withdrawal. *Cochrane Database of Systematic Reviews*. 2009;Issue 2. Art. No.: CD002024. DOI: 10.1002/14651858.CD002024.pub3.
64. Gowing L, Ali R, White JM. Opioid antagonists with minimal sedation for opioid withdrawal *Cochrane Database of Systematic Reviews*. 2009;Issue 4. Art. No.: CD002021. DOI: 10.1002/14651858.CD002021.pub3.
65. Terplan M LS. Psychosocial interventions for pregnant women in outpatient illicit drug treatment programs compared to other interventions. *Cochrane Database of Systematic Reviews*. 2008;Issue 3.
66. Minozzi S, Amato L, Vecchi S, M D. Maintenance agonist treatments for opiate dependent pregnant women. *Cochrane Database of Systematic Reviews*. 2011;Issue 10.
67. Amato L, Minozzi S, Davoli M, Vecchi S. Psychosocial and pharmacological treatments versus pharmacological treatments for opioid detoxification. *Cochrane Database of Systematic Reviews*. 2011;Issue 9. Art. No.: CD005031. DOI: 10.1002/14651858.CD005031.pub4.
68. Mayet S, Farrell M, Ferri M, Amato L, Davoli M. Psychosocial treatment for opiate abuse and dependence. *Cochrane Database of Systematic Reviews*. 2010;Issue 4. Art. No.: CD004330. DOI: 10.1002/14651858.CD004330.pub2.
69. Amato L, Minozzi S, Pani PP, Davoli M. Antipsychotic medications for cocaine dependence. *Cochrane Database of Systematic Reviews*. 2010;Issue 3.
70. Denis C, Lavie E, Fatseas M, Auriacombe M. Psychotherapeutic interventions for cannabis abuse and/or dependence in outpatient settings. *Cochrane Database of Systematic Reviews*. 2008;Issue 3.
71. Pani PP, Trogu E, Vacca R, Amato L, Vecchi S, Davoli M. Disulfiram for the treatment of cocaine dependence. *Cochrane Database of Systematic Reviews*. 2010;Issue 1. Art. No.: CD007024. DOI: 10.1002/14651858.CD007024.pub2.

72. Pani PP, Trogu E, Vecchi S, Amato L. Antidepressants for cocaine dependence and problematic cocaine use Cochrane Database of Systematic Reviews. 2011;Issue 12. Art. No.: CD002950. DOI: 10.1002/14651858.CD002950.pub3.
73. Srisurapanont M, Jarusuraisin N, Kittirattanapaiboon P. Treatment for amphetamine dependence and abuse. Cochrane Database of Systematic Reviews. 2008;Issue 4. Art. No.: CD003022. DOI: 10.1002/14651858.CD003022.
74. Chevalier P, Dereau P, Duray D, Gailly J, Paulus D, Vanhalewyn M. Geneesmiddelenverslaving. Gevalideerd door CEBAM in januari 2009.
75. National Health Service - NHS Clinical Knowledge Summaries (CKS). Benzodiazepine and z-drug withdrawal - Management. UK2009.
76. Lader M, Russell J. Guidelines for the prevention and treatment of benzodiazepine dependence: summary of a report from the Mental Health Foundation. Addiction. 1993;88(12):1707-8.
77. Mant A, Walsh RA. Reducing benzodiazepine use. Drug and Alcohol Review. 1997;16(1):77-84.
78. Ashton CH. How to withdraw from benzodiazepines after long-term use. University of Newcastle, 2002.
79. Australian Government Department of Health and Ageing. Chapter 11. Benzodiazepines. Alcohol and other drugs: a handbook for health professionals: Australian Government Department of Health and Ageing; 2004.
80. Taylor D, Paton C, Kerwin R. The Maudsley prescribing guidelines. London: Informa Healthcare; 2007.
81. NHG - Dutch College of General Practitioners. NHG Standaard – Slaapproblemen en slaapmiddelen (M23). 2005; Available from: http://nhg.artsenet.nl/kenniscentrum/k_richtlijnen/k_nhgstandaarden/Samenvattingskaartje-NHGStandaard/M23_svk.htm.
82. Psychopharmacology BAf. Evidence-based guidelines for the pharmacological management of substance misuse, addiction and comorbidity: recommendations from the British Association for Psychopharmacology. 2004.
83. Ashton CH. Slow withdrawal schedules. The Ashton Manual: University of Newcastle; 2002.
84. Mugunthan K, McGuire T, Glasziou P. Minimal interventions to decrease long-term use of benzodiazepines in primary care: a systematic review and meta-analysis. B J Gen Pract. 2011.
85. Denis C, Fatseas M, Lavie E, Auriacombe M. Pharmacological interventions for benzodiazepine mono- dependence management in outpatient settings. Cochrane Database of Systematic Reviews. 2008;Issue 3.

Appendices

Appendix 1: Search Strategy

Search strings used with MeSH Terms

a) What are the most effective methods for GPs and OPs to detect alcohol abuse among adult patients?

Alcohol-Related Disorders [Mesh] OR Alcohol Drinking [Mesh] AND Substance Abuse Detection [Mesh] OR Diagnosis [Mesh] AND General practitioners [Mesh] OR Primary Health Care [Mesh] OR Physicians [Mesh] OR Occupational Health Physicians [Mesh] OR Family Practice [Mesh]

b) What are the most effective methods for GPs and OPs to detect illicit drug use among adult patients?

Street Drugs [Mesh] OR Designer Drugs [Mesh] OR Substance-Related Disorders [Mesh] AND Substance Abuse Detection [Mesh] OR Diagnosis [Mesh] AND General practitioners [Mesh] OR Primary Health Care [Mesh] OR Physicians [Mesh] OR Occupational Health Physicians [Mesh] OR Family Practice [Mesh]

c) What are the most effective methods for GPs and OPs to detect hypnotics and tranquilizers abuse among adult patients?

Tranquilizing Agents [Mesh] OR Hypnotics and Sedatives [Mesh] OR Substance-Related Disorders [Mesh] OR Benzodiazepines [Mesh] AND Substance Abuse Detection [Mesh] OR Diagnosis [Mesh] AND General practitioners [Mesh] OR Primary Health Care [Mesh] OR Physicians [Mesh] OR Occupational Health Physicians [Mesh] OR Family Practice [Mesh]

d) What are the most effective interventions for GPs and OPs to treat alcohol abuse by adult patients?

Drug therapy [Mesh] OR therapeutics [Mesh] OR counseling [Mesh] OR Self-Help Groups [Mesh] AND Alcohol-Related Disorders [Mesh] OR Substance-Related disorders [Mesh] AND General practitioners [Mesh] OR Primary Health Care [Mesh] OR Physicians [Mesh] OR Occupational Health Physicians [Mesh] OR Family Practice [Mesh]

e) What are the most effective interventions for GPs and OPs to treat illicit drug use by adult patients?

Therapy [Mesh] OR Drug therapy [Mesh] OR Psychotherapy [Mesh] OR counseling [Mesh] OR Opiate Substitution Treatment [Mesh] OR Self-Help Groups [Mesh] AND Street Drugs [Mesh] OR Designer drugs [Mesh] OR Marijuana Abuse [Mesh] AND General practitioners [Mesh] OR Primary Health Care [Mesh] OR Physicians [Mesh] OR Occupational Health Physicians [Mesh] OR Family Practice [Mesh]

f) What are the most effective interventions for GPs and OPs to treat hypnotics and tranquilizers abuse with adult patients?

Tranquilizing Agents [Mesh] OR Benzodiazepines [Mesh] OR Hypnotics and Sedatives [Mesh] AND counseling [Mesh] OR Psychotherapy [Mesh] OR Drug Substitution [Mesh] OR Self-Help Groups [Mesh] AND General practitioners [Mesh] OR Primary Health Care [Mesh] OR Physicians [Mesh] OR Occupational Health Physicians [Mesh] OR Family Practice [Mesh]

g) What are the most effective models for referral and collaboration between GPs, OPs, and specialized centres/psychotherapists on alcohol abuse?

Cooperative behavior [Mesh] OR Referral and consultation [Mesh] OR Interdisciplinary Communication [Mesh] AND Substance-Related Disorders [Mesh] OR Alcohol-Related disorders [Mesh] AND General practitioners [Mesh] OR Primary Health Care [Mesh] OR Physicians [Mesh] OR Occupational Health Physicians [Mesh] OR Family Practice [Mesh]

h) What are the most effective models for referral and collaboration between GPs, OPs, and specialized centres on illicit drug use?

Cooperative behavior [Mesh] OR Referral and consultation [Mesh] OR Interdisciplinary Communication [Mesh] AND Street Drugs [Mesh] OR Designer drugs [Mesh] OR Marijuana Abuse [Mesh] AND General practitioners [Mesh] OR Primary Health Care [Mesh] OR Physicians [Mesh] OR Occupational Health Physicians [Mesh] OR Family Practice [Mesh]

i) What are the most effective models for referral and collaboration between GPs, OPs, and specialized centres on hypnotics and tranquilizers abuse?

Cooperative behavior [Mesh] OR Referral and consultation [Mesh] OR Interdisciplinary Communication [Mesh] AND Tranquilizing Agents [Mesh] OR Benzodiazepines [Mesh] OR Hypnotics and Sedatives [Mesh] OR Substance-Related Disorders [Mesh] AND General practitioners [Mesh] OR Primary Health Care [Mesh] OR Physicians [Mesh] OR Occupational Health Physicians [Mesh] OR Family Practice [Mesh]

Appendix 2: Inclusion and exclusion criteria

Eligibility criteria

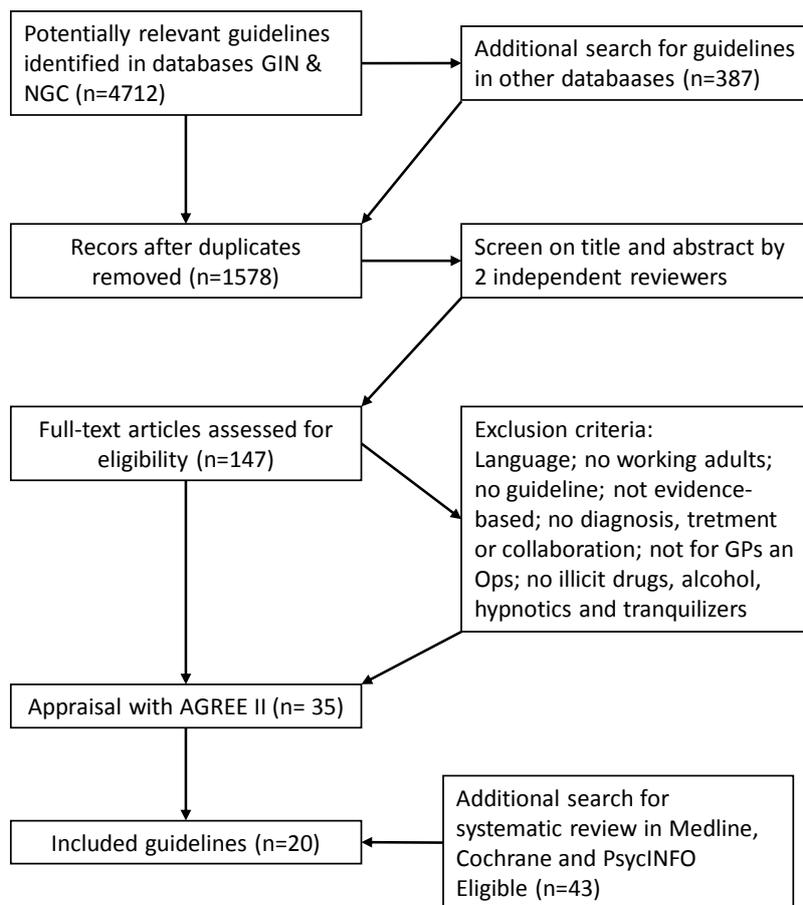
Inclusion criteria:

- Clinical guideline
- Adult population (18-65 years old), working population
- Alcohol dependent subjects, illicit drugs or hypnotics, tranquilizers and sedatives
- General Practitioner and/or Occupational Physician
- Guidelines concerning detection (diagnosis), treatment or/and referral
- Guidelines in Dutch, French, English, Spanish and German
- Guidelines published between 2002-2012 (last 10 years, every guideline before must have been revised)

Exclusion criteria:

- Children and youth, geriatric people, people with cognitive impairments, indigenous people
- Other languages than Dutch, French, English, Spanish and German
- Co-morbidity
- Specialist settings, inpatient setting
- Systematic reviews, consensus, technical reports, opinions, comments, letters, editorial, etc.

Appendix 3: Flowchart results: ADAPTE framework



Appendix 4: Table with details of 20 eligible guidelines

Organization	Year	Country	Guideline title
Domus Medica	2009	Belgium	Geneesmiddelenverslaving
Domus Medica	2011	Belgium	Problematisch alcoholgebruik – Aanpak door de huisarts
Landelijke Stuurgroep Multidisciplinaire Richtlijnontwikkeling in de GGZ	2009	The Netherlands	Multidisciplinaire richtlijn: Stoornissen in het gebruik van Alcohol
Society of Obstetricians and Gynaecologists of Canada (SOGC)	2010	Canada	Alcohol Use and Pregnancy Consensus Clinical Guidelines
Society of Obstetricians and Gynaecologists of Canada (SOGC)	2011	Canada	Substance Use in Pregnancy
U.S. Preventive Services Task Force (USPSTF)	2008	US	Screening for illicit drug use: U.S. Preventive Services Task Force recommendation statement.
NHG	2005	The Netherlands	NHG Standaard – Slaapproblemen en slaapmiddelen
NHG	2005	The Netherlands	NHG-Standaard Problematisch alcoholgebruik
NICE	2010	UK	Alcohol-use disorders: preventing the development of hazardous and harmful drinking
NICE	2007	UK	Drug misuse: psychosocial interventions
NICE	2007	UK	Drug Misuse: Opioid detoxification
NICE	2011	UK	Diagnosis, assessment and management of harmful drinking and alcohol dependence
SIGN	2004	UK	The management of harmful drinking and alcohol dependence in primary care
VA/DoD	2009	US	Management of Substance Use Disorders (SUD)
Australian Government Department of Health and Ageing	2009	Australia	Guidelines for the treatment of alcohol problems
World Health Organization	2009	Switzerland	Guidelines for the Psychosocially Assisted Pharmacological Treatment of Opioid Dependence
NHS (CKS)	2010	UK	Opioid dependence - Management
NHS (CKS)	2009	UK	Benzodiazepine and z-drug withdrawal
NHS (CKS)	2011	UK	Alcohol - problem drinking - Management
Vereniging voor Alcohol- en andere Drugproblemen (VAD)	2008	Belgium	Richtlijnen bij het voorschrijven van benzodiazepines aan illegale druggebruikers

A review of guidelines for collaboration in substance misuse management

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Abstract

Background: Substance misuse among the working population results in increasing economic costs. General practitioners (GPs) and occupational physicians (OPs) can play a central role in detecting and managing substance misuse in the working population. Their collaboration could be critical in coordinating care, in facilitating rehabilitation and in reducing sickness absence.

Aims: To search guidelines for evidence on collaboration between GPs and OPs in substance misuse detection and management in the working population.

Methods: International guidelines regarding collaborative care for alcohol, illicit drug, hypnotic and tranquiliser misuse were identified by a systematic search in the Guidelines International Network (GIN) and US National Guidelines Clearinghouse (NGC) databases.

Results: In total, 20 guidelines were considered of sufficient methodological quality, based on the criteria of the Appraisal of Guidelines for Research and Education (AGREE) II instrument. Only two guidelines reported on the OP's role in screening and intervention for alcohol misuse.

Conclusions: There is a lack of guidance on the OP's role and on collaboration between GPs and OPs in this field. Further study is required on their respective roles in substance misuse management, the effectiveness of workplace interventions and the benefits of collaboration.

Keywords: substance-related disorders – guidelines – collaboration - general practitioners – occupational health physicians-substance misuse

Introduction

Problematic rates of alcohol and drug use are observed among the working population in Europe, resulting in increasing costs for employers and a highly negative impact on workplaces in terms of productivity losses, absenteeism and healthcare expenditure [1].

General practitioners (GPs) and occupational physicians (OPs) can play a central role in detecting and managing substance misuse in the working population [2, 3]. It has been suggested that inter-professional collaboration between GPs and OPs may be beneficial for rehabilitation for work [4]. The aim of this study was to search for evidence on the effectiveness of collaboration between GPs and OPs managing misuse of alcohol, illicit drugs, tranquilisers and hypnotics and for resources and strategies that can be used by these health professionals in collaboration.

Methods

Our search strategy, as presented in figure 1, was part of a broader search for guidelines for GPs and OPs regarding substance misuse management in the Belgian working population. We undertook a detailed search for international guidelines to identify evidence on recommendations for collaboration in substance misuse management between GPs and OPs. Guidelines published between 2002 and 2012 were identified using the databases Guidelines International Network (GIN) and US National Guidelines Clearinghouse (NGC). Multiple and broad searches were performed with MeSH Terms such as *Cooperative behaviour, Referral and consultation, Interdisciplinary Communication, Substance-Related Disorders, Alcohol-Related disorders, General practitioners, Primary Health Care, Physicians, Occupational Health Physicians, Family Practice, Workplace* (using the Boolean terms “AND” “OR”). The full search strategy is available on request from the authors. Several guideline development organisations’ and professional substance misuse organisations’ websites were also screened. After excluding many duplicates a first selection of guidelines based on title and abstract was undertaken by two researchers using the following eligibility criteria: guidelines concerning the adult working population (18 - 65 years old), published either in Dutch, English, French, German, or Spanish languages and intended for GPs and/or OPs. Guidelines were excluded if the primary focus was not on illicit drugs, alcohol misuse, tranquilisers or hypnotics. Guidelines were further assessed on quality by two independent researchers using the Appraisal of Guidelines for Research and Education (AGREE) II instrument [5]. The appraisal scores for the methodological procedure of the guideline development were given the highest weight. Finally guidelines with a methodology score of more than 50% were included. An additional search for studies published after the latest guideline yielded no results. No ethical approval was required since no human subjects were involved.

Results

A total of 5099 citations were found. After exclusions 35 guidelines were assessed of which 20 eligible guidelines were screened on full text for ‘collaboration’ between OPs and GPs. Two guidelines included recommendations for OPs [3, 6] but these only concerned alcohol misuse. These guidelines suggest that in cases where harmful alcohol use is identified the subject should be referred to clinicians with expertise in diagnosis and management of alcohol misuse. Motivational communication by the OP towards the employee is essential [3]. However, no recommendation was made on how care should be further coordinated.

In Australia, it has been recommended that screening and interventions should be introduced in workplaces where the risk of alcohol misuse is high [6], and further that this should be accompanied by other intervention strategies. This recommendation was based on expert opinion only, as there is a lack of adequate studies on the effectiveness of screening and brief interventions in the workplace [3, 6] and therefore the OP’s role in substance abuse management is currently undefined [3].

Discussion

Despite the high number of guidelines that were initially identified, our results indicated a lack of evidence about the role of the OP in substance misuse management. There was also a lack of evidence on collaboration with other health professionals in substance misuse among working people; similarly data was lacking concerning effective ways to manage substance misuse in the occupational setting. In the light of the potential negative impact of substance misuse on working conditions it is in our view important to address this research gap.

Initiatives are being implemented to improve the collaboration between these two professional groups [7]. It was found that most GPs and OPs expressed a desire for better cooperation to improve the quality of care and suggested that interaction between them could be improved by a deeper understanding of their respective roles, constraints and levels of influence [4, 8]. Several conditions however must be met to facilitate this.

Further study is needed on the role of GPs and OPs in the detection and management of substance misuse in the workplace. The OP faces many professional conflicts in workplace drug testing, which has been the subject of ethical debate [9], with opposing views on employees' and employers' rights. Moreover occupational health is primarily a prevention-orientated activity, involving a range of skills required to identify, accurately assess and devise strategies to manage and promote the health of the working population [10]. In the occupational setting, many other stakeholders have a role, especially the employer and management but also the trade unions. Even though the interplay between stakeholders in substance misuse management varies widely from country to country [10], depending on culture and regulations, the OP's role in substance misuse management would benefit from a clearer definition. Qualitative research on the views of different stakeholders may help to shed light on the potential role of the OP. Efficient strategies for early detection are needed and the impact of short interventions on the workplace needs to be evaluated. Finally, studies with good quality indicators testing and comparing different models of collaboration between OPs and GPs are needed.

Key Points

- The role of occupational physicians in substance abuse management remains uninvestigated and subject to debate
- No guidelines or publications are currently available on the effectiveness of collaboration between general practitioners and occupational physicians in this field
- We recommend further study on the role of the GP and OP in substance misuse management, the effectiveness of workplace interventions and benefits of collaboration between GPs and OPs.

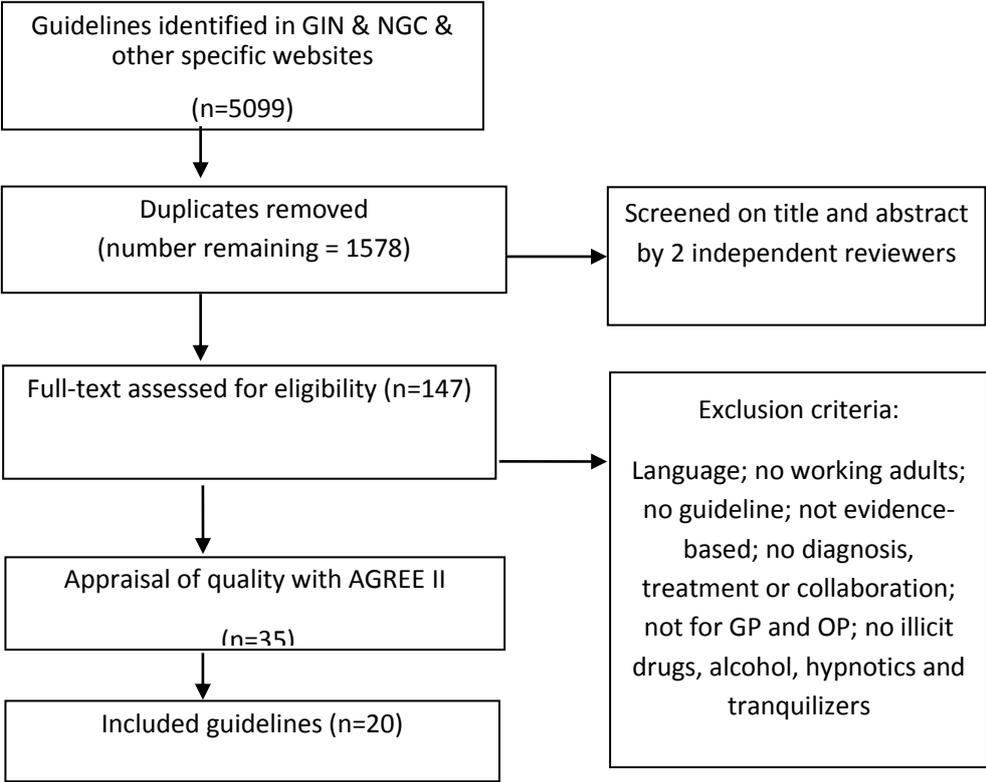
Competing Interests

None declared

References

1. Corral A, Durán J, Isusi I. Use of alcohol and drugs at the workplace. EU: IKEI, 2012.
2. Lambert SD. The role of the occupational physician in substance abuse. *Occup Med.* 2002;**17**(1):1-12.
3. Landelijke Stuurgroep Multidisciplinaire Richtlijnontwikkeling in de GGZ Multidisciplinaire Richtlijn Stoornissen in het gebruik van alcohol. Richtlijn voor de diagnostiek en behandeling van volwassen patiënten met een stoornis in het gebruik van alcohol. Utrecht: Trimbos Instituut; 2009.
4. Beaumont DG. The interaction between general practitioners and occupational health professionals in relation to rehabilitation for work: a Delphi study. *Occup Med.* 2003;**S3**:249–53.
5. The AGREE Collaboration. Appraisal of Guidelines for Research and Evaluation II. 2009.
6. Australian Government Department of Health and Ageing. Guidelines for the treatment of alcohol problems. 2009.
7. Buijs P, Van Amstel R, FJ VD. Dutch occupational physicians and general practitioners wish to improve cooperation *Occup Environ Med.* 1999;**56**:709–13.
8. Mairiaux P, Vanmeerbeek M, Schippers N, Denoël P, Tiedtke C, Mortelmans K, et al. Amélioration de la collaboration entre le médecin généraliste et les médecins conseils et les médecins du travail pour une meilleure prise en charge des pathologies d'origine professionnelle. Brussels: Federal Public Service Employment, Labour and Social Dialogue, 2011.
9. Shahandeh B, Caborn J. Ethical issues in workplace drug testing in Europe. Geneva: International Labour Office, 2003.
10. Whitaker S, Baranski B. The Role of the Occupational Health Nurse in Workplace Health Management. Copenhagen: WHO Regional Office for Europe, 2001.

Figure 1: flowchart of guideline selection process



Patients with problematic use of substances in Belgian family practice. Results of a pilot study by the Belgian Network of Sentinel General Practices

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Introduction

In Belgium, prevalence and patterns of drug use among the general population are monitored through the health interview surveys, conducted by the Scientific Institute of Public Health (IPH). The last one was performed in 2013, and its results on substance abuse are now available (1-3). The IPH is also in charge of the Belgian Treatment Demand Indicator Register (BTDIR), which is part of the monitoring system of the European Monitoring Centre for Drugs and Drug Addiction (EMCDDA).

As part of the Up to Date project, the consortium initiated a collaboration with the IPH to assess to what extent substance abuse is currently managed by general practitioners (GPs). The Belgian network of Sentinel General Practices (SGP) was used as a tool to retrieve such information.

The Belgian network of SGP is a nationwide, paper-based network; it comprises approximately 150 general practices with *“voluntary, self-selected sentinel GPs who purposively record routine clinical care data for the surveillance of specific health problems or care delivery. Participation in the Belgian network of SGP is subject-independent, i.e. sentinel GPs cannot choose to report only on their preferred subjects. This is an important prerequisite for a representative network in terms of morbidity and patient management. Sentinel surveillance by GPs is an accepted system of public health surveillance....”* (4)

Anonymous data from clinical practice on well-defined problems are reported weekly on standard registration forms, normally for a period of at least one year. As Belgian GPs do not serve a defined practice population, the size of the SGP patient population is estimated by applying the ratio of GP patient contacts in the entire Belgian population to the sum of weekly patient contacts in the network. Annual surveys show that sentinel GPs are comparable to non-sentinel GPs in age and gender and that the network covers 1.4% to 1.8% of the Belgian population throughout all regions.

This pilot study aimed to describe characteristics of working age general practice patients with treated problematic use of substances, the treatment they receive and treatment outcome after 5 months. A specific objective is to describe the occupational or employment status of the patients at baseline and follow-up.

Moreover, the study aimed at assessing: 1) the utility of SGP surveillance given the ongoing existence of Treatment Demand Indicator (TDI) data collection of patients with a new treatment episode in specialized treatment centers in Belgium; and 2) the feasibility of a regular 1-year surveillance study by the complete SGP network of patients with treated/known problematic use of substances.

This study is no prevalence study; it cannot give a workload estimate in general practice settings.

Methods

A registration form was developed in close collaboration of researchers from the Up to Date consortium (AL, LP, FK, and MV) and from the IPH (VVC, NB, and JA).

The registration form registered:

- The substances that were used in a problematic way during the last four weeks or during long-term use (over four weeks), and the number of years of problematic use: alcohol, binge drinking, cannabis, opiates (heroin), methadone or substitution treatment, cocaine, ecstasy, psychostimulants (amphetamine), hypnotics, tranquillizers, opiate painkillers, or others;
- The issues related to substance abuse: physical health issues (e.g. injuries; see table 3), psychological health issues (depression, anxiety, sleeping disorders, suicide attempt, suicidal risk), employment issues (relationship issues, absenteeism, threat of dismissal, change of working position), and social issues (with partner/relatives, judiciary, financial, social isolation);
- The current working status (four last weeks) and profession, or, if not at work, the reason why (unemployment, retirement, sick leave, no professional income, permanent disability, student);
- The current management, by the GP, in a residential or ambulatory facility, by a specialized mental health professional; in any case, what kind of technique was used (brief intervention, psychological or non-drug related management, drug therapy: vitamins, anxiolytics, hypnotics or sedatives, anti-depressants, drug indicated for the maintenance of abstinence). Was the recorded contact the first one for substance abuse management? Was the patient referred for physical issue related to substance abuse?

In this pilot study the (baseline) data were collected of all patients who were treated for problematic use of substances during a 5 months period, between 13 May and 13 October 2013, using weekly standard forms. Follow-up data were collected for all recorded patients five months after baseline registration.

Inclusion criteria and definitions were described on an instruction sheet addressed to all SGP. All sentinel GPs were asked to complete the standard form at the first contact with all the patients between 18 and 64 years old they were treating for problematic use of substances. All patients were to be included only once. Therefore, the sentinel GPs received a list of recorded patients in February 2014 with the request to correct and complete the list.

Definitions were given for binge drinking (“occasional use of large quantities of alcohol in a short period: ≥ 6 units for men or ≥ 4 units for women in a period of 2 hours”) and brief intervention (“a brief face to face talk with the patient to inform him, enhance his awareness and reflections on solving the problematic use of substances. The intervention may be informal or formal, in the latter case using techniques for change. The length of the intervention may vary between 30 seconds and 15 minutes in the context of one consultation, and the intervention may be repeated”).

A pooled dataset of SGP-patients with ≥ 1 new treatment episodes receiving GP-care only, and all TDI patients 18-64 years in same time period was constructed. The comparison between the SGP and the TDI population is still in progress and thus not included here.

In February 2014, all participating SGP received a list of their recorded patients, and four questions about the pilot study.

Results

Participants

104 of 139 existing SGP practices participated, and 479 patients were registered at baseline, of whom 396 (83%) were followed up at the end of the registration period (figure 1). 322 patients (67%) had one or more contact with the GP during the 5-months follow-up, and 183 during the last month.

66% of the patients were men, and 34% women. The median age was 47 years; 35% of the population was 45-54 old (table 1).

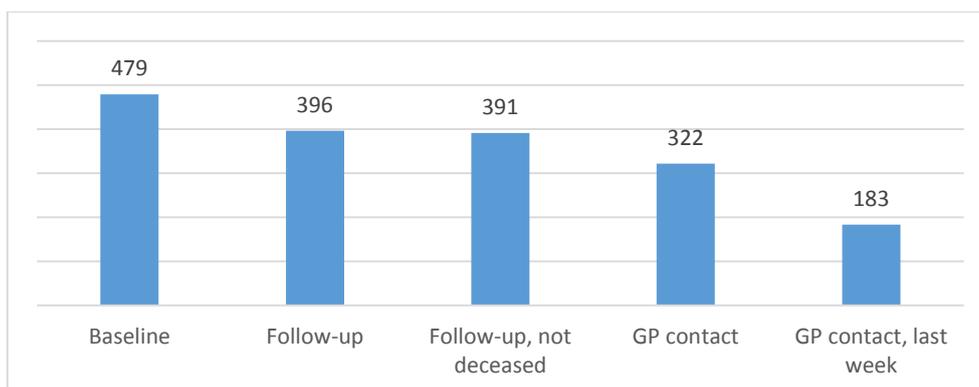


Figure 5: Study data flow

Table 1

Age groups	%
<25	5
25-34	17
35-44	20
45-54	35
55-64	23

Substance use

47% of the patients used alcohol only, 23% used alcohol and another substance; 30% used another substance. 47% of the patients were abstinent during the last month.

It was the first treatment for 24% of the patients, most patients already had been treated for problems of substance use. The substance abuse occurred over a long period for most of the patients: 57% abused for more than ten years (table 2).

Only 3% of the patients had no physical, mental, social or other problems of substance use.

Table 2

Years of use	%
<1	5
2-4	18
5-9	21
10-19	35
>20	21

The substance related problems are listed in table 3.

Table 3: Patients' characteristics (N=479)

	Total
Gender	N (%)
Men	315 (66.5)
Women	159 (33.5)
Age	
<25	24 (5.0)
25-34	82 (17.1)
35-44	96 (20.0)
45-54	166 (34.7)
55-64	111 (23.2)
Substance use	305(63.7)
Problematic use of substances	
Alcohol	336 (70.2)
Binge drinking	22(4.6)
Alcohol, without binge drinking	314(65.6)
alcohol only	226(47.2)
Cannabis	102(21.3)
Opiates	61(12.7)
Methadone	53(11.1)
Cocaine	39(8.1)
Ecstasy	9(1.9)
DRUGS (cannabis and/or opiates and/or cocaine and/or ecstasy)	139(29.0)
Psychostimulants	18(3.8)
Hypnotics	46(9.6)
Tranquillizers	75(15.7)
Opiate painkillers	34(7.1)
drugs (one or more than 4)	168(35.1)
Other substances	6(1.3)
Years of problematic use	
1 and less	16(4.3)
2-4	64(17.2)
5-9	80(21.5)
10-19	129(34.6)
20+	84(22.5)
Problems related to substance use	
Physical problems	
Gastro-intestinal problems	110(23.0)
Injuries (accidental or due to violence)	87(18.2)
Cardiovascular problems	51(10.7)
Respiratory problems	24(5.0)
Other problems	52(10.7)
PHYSICAL PROBLEMS ONLY	233(48.6)

Psychological problems	
Depression	223(46.6)
Anxiety	196(40.9)
Sleeping disorders	172(35.9)
memory and concentration problems	110(23.0)
Suicide attempt	29(6.1)
Suicidal risk	25(5.2)
Other problems	31(6.5)
PSYCHOLOGICAL PROBLEMS ONLY	378(78.9)
Problems at work (for those who are at work)	
Relationship issues	54(30.0)
Absenteeism	37(20.6)
Threat of dismissal	17(9.4)
Change of working position	14(7.8)
Other problems	5(2.8)
PROBLEMS AT WORK ONLY	91(50.6)
Social problems	
With partner/relatives	265(55.3)
Judiciary	66(13.8)
Financial	140(29.2)
Social isolation	110(23.0)
Other problems	13(2.7)
SOCIAL PROBLEMS ONLY	351(73.3)
ANY PROBLEM	466(97.3)
Work status	
At work	180(39.3)
Unemployment	69(15.1)
Sick leave	43(9.4)
Permanent disability	88(19.2)
Student	7(1.5)
Retirement	28(6.1)
No professional income	43(9.4)

Work-related status

Only 40% of the patients were still at work. The work status are presented in table 4.

Table 4

Work status	%
At work	40
Out of work	15
Sick leave	9
Incapacity	19
Student	2
Retired	6
No occupational income	9

Treatment at baseline

At baseline, 69% of the GPs offered a brief intervention, 53% provided non-pharmaceutical or psychological support, and pharmaceutical treatment occurred for 61% of the patients.

At baseline, one out of two patients (52%) was receiving treatment from their GP alone. Logistic regression showed that this occurred mainly in case of mono-substance use (OR 2.4 [CI 1.1-5.6]), or low (<median) number of substance-related problems (physical, mental, work, or social) (OR 5.5 [CI 2.5-12.1]).

We also found that only 14% of the patients with a first treatment episode were treated by their GP alone at baseline. Overall, 5% of the patients were treated by a specialist caregiver only.

Limitations

Some data were difficult to interpret and look like inconsistent, e.g. no physical problems reported for 29 of 99 patients who received a referral for physical problems; 33 of 183 patients received a brief intervention mentioned as follow-up by a specialised caregiver. 9% of the data for previous treatment were missing.

In their opinion, 29% of the GPs are outliers in terms of number of users, type of use, GP expertise and GP care.

From the GPs' opinion, the registration forms were considered too long and complex; more definitions should be given (e.g. "treatment for substance use" versus "general care", "new" versus "ongoing" treatment episode). Should the patients without face-to-face contacts with SGP be included?

Conclusion

GPs provide their patients both pharmacological and non-pharmacological treatment. At baseline, half of the patients were receiving treatment from their GP alone. Patients with less complex problems have higher odds to receive GP care only. GPs are most likely managing older patients, with milder problems, more often still at work, with mono-substance use (especially alcohol), long-time use, already being in treatment, and abstinent in last month.

Regular surveillance of treated/known problematic substances use by SGP should be feasible; 80% of the SGP consider a regular surveillance is feasible.

References

1. Gisle L. La consommation d'alcool. Dans : Gisle L, Demarest S (éd.). Enquête de santé 2013. Rapport 2 : Comportements de santé et style de vie. WIV-ISP, Bruxelles, 2014
2. Gisle L. L'usage de drogues. Dans : Gisle L, Demarest S (éd.). Enquête de santé 2013. Rapport 2 : Comportements de santé et style de vie. WIV-ISP, Bruxelles, 2014
3. Gisle L. Santé mentale. Dans : Van der Heyden J, Charafeddine R (éd.). Enquête de santé 2013. Rapport 1 : Santé et Bien-être. WIV-ISP, Bruxelles, 2014
4. Boffin N, Moreels S, Van Casteren V. The Belgian network of Sentinel General Practices between 2007 and 2012: a short report. Brussels, Institute of Public Health, November 2013.

Annex 1: registration forms (French and Dutch)

<p>Société Scientifique de Médecine Générale</p>  <p>http://www.ssmg.be</p>	<p>Médecins Vigies</p> <p>Fédération Wallonie - Bruxelles | Direction générale de la Santé Vlaams Ministerie van Welzijn, Volksgezondheid en Gezin - Agentschap Zorg en Gezondheid Institut Scientifique de Santé Publique DO Santé publique et Surveillance Service Etude des Soins de Santé - Dr V. VAN CASTEREN - 02/642.50.30 Rue J. Wytman, 14 - 1050 Bruxelles http://www.wiv-isp.be/epidemie/medv</p>	 <p>domus medica</p> <p>http://www.domusmedica.be</p>		
ETUDE PILOTE / 13 mai - 13 octobre 2013				
PATIENTS PRIS EN CHARGE POUR USAGE PROBLÉMATIQUE DE SUBSTANCES				
votre référence (p.ex. initiales).....				
Date de naissance : . . / . . /		Sexe : <input type="checkbox"/> H <input type="checkbox"/> F		
Substances faisant / ayant fait l'objet d'un usage problématique				
Usage récent (≤4 semaines)	Usage prolongé (> 4 semaines) <i>seulement s'il n'y a pas d'usage récent</i>	Nbre d'années d'usage problématique		
<input type="checkbox"/> Alcool (autre que binge drinking)	<input type="checkbox"/> Alcool (autre que binge drinking)	.....	
<input type="checkbox"/> Binge drinking	<input type="checkbox"/> Binge drinking	.....	
<input type="checkbox"/> Cannabis	<input type="checkbox"/> Cannabis	.....	
<input type="checkbox"/> Opiacés (héroïne)	<input type="checkbox"/> Opiacés (héroïne)	.....	
<input type="checkbox"/> Méthadone/autre traitement substitution	<input type="checkbox"/> Méthadone/autre traitement substitution	.....	
<input type="checkbox"/> Cocaïne	<input type="checkbox"/> Cocaïne	.....	
<input type="checkbox"/> Ecstasy	<input type="checkbox"/> Ecstasy	.....	
<input type="checkbox"/> Psychostimulants (amphétamine)	<input type="checkbox"/> Psychostimulants (amphétamine)	.....	
<input type="checkbox"/> Hypnotiques	<input type="checkbox"/> Hypnotiques	.....	
<input type="checkbox"/> Tranquillisants	<input type="checkbox"/> Tranquillisants	.....	
<input type="checkbox"/> Antidouleurs opiacés	<input type="checkbox"/> Antidouleurs opiacés	.....	
<input type="checkbox"/> Autres :	<input type="checkbox"/> Autres : .....	.....	
Indiquez à quel(s) problème(s) l'usage de substance est/a été lié				
Problèmes physiques	Problèmes psychiques	Au travail	Problèmes sociaux	
<input type="checkbox"/> Blessures, accident, violence	<input type="checkbox"/> Dépression	<input type="checkbox"/> Problèmes relationnels	<input type="checkbox"/> Avec partenaire/famille	
<input type="checkbox"/> Gastro-intestinaux	<input type="checkbox"/> Anxiété	<input type="checkbox"/> Absentéisme ou retard	<input type="checkbox"/> Problèmes judiciaires	
<input type="checkbox"/> Cardiovasculaires	<input type="checkbox"/> Problèmes de sommeil	<input type="checkbox"/> Menace de licenciement	<input type="checkbox"/> Problèmes financiers	
<input type="checkbox"/> Respiratoires	<input type="checkbox"/> Tentative de suicide	<input type="checkbox"/> Changement poste travail	<input type="checkbox"/> Isolement	
<input type="checkbox"/> Troubles mémoire et concentration	<input type="checkbox"/> Risque de suicide	Autre :	Autre :	
<input type="checkbox"/> Autre :	<input type="checkbox"/> Autre :			
Activité professionnelle				
Le patient est-il actuellement au travail ou l'était-il encore récemment (≤ 4 semaines) ? <input type="checkbox"/> Oui <input type="checkbox"/> Non <input type="checkbox"/> ?				
Si non, précisez la raison ? <i>1 seule réponse possible</i>		Si oui, quelle profession :		
<input type="checkbox"/> Chômage	<input type="checkbox"/> Congé de maladie	<input type="checkbox"/> Invalidité permanente (INAMI)	<input type="checkbox"/> Etudiant	
<input type="checkbox"/> Pensionné	<input type="checkbox"/> Sans revenu professionnel	<input type="checkbox"/> Autre :		
Prise en charge (choix multiple)				
	Par vous-même	Centre résidentiel de traitement	Centre ambulatoire de traitement	Prestataire spécialisé en santé mentale (privé)
Intervention brève	<input type="checkbox"/> Nouveau <input type="checkbox"/> En cours			
Prise en charge non médicamenteuse/ psychologique	<input type="checkbox"/> Nouveau <input type="checkbox"/> En cours	<input type="checkbox"/> Nouveau <input type="checkbox"/> En cours	<input type="checkbox"/> Nouveau <input type="checkbox"/> En cours	<input type="checkbox"/> Nouveau <input type="checkbox"/> En cours
Traitement médicamenteux	<input type="checkbox"/> Nouveau <input type="checkbox"/> En cours	<input type="checkbox"/> Nouveau <input type="checkbox"/> En cours	<input type="checkbox"/> Nouveau <input type="checkbox"/> En cours	
Autre prise en charge :				
Est-ce la première fois que le patient est pris en charge pour un usage problématique de substances ? <input type="checkbox"/> Oui <input type="checkbox"/> Non <input type="checkbox"/> ?				
Avez-vous référé le patient au cours de cette consultation pour un problème physique lié à l'usage problématique de substances ? <input type="checkbox"/> Oui <input type="checkbox"/> Non				
Avez-vous prescrit au patient un médicament en relation avec l'usage problématique de substances au cours de cette consultation ? <input type="checkbox"/> Oui <input type="checkbox"/> Non				
Si oui, <input type="checkbox"/> suppléments vitaminés <input type="checkbox"/> anxiolytiques, hypnotiques ou sédatifs <input type="checkbox"/> antidépresseurs				
<input type="checkbox"/> médicament favorisant l'abstinence ou la réduction de la consommation:				
<input type="checkbox"/> autre:				

Semaine n° 20 : du 13/05 / 2013 au 19/05 / 2013

Instructions

Qui enregistrer ?

Enregistrez au premier contact pendant la période d'enregistrement, les données de vos patients âgés de 18 à 64 ans pris en charge pour un usage problématique de substances (alcool, drogues illégales, médicaments), que ce soit la première fois ou non que vous les voyez pour ce problème.

La prise en charge inclut le suivi et les soins de postcure.

Nous ne précisons ni la quantité ni la fréquence de l'usage. L'enregistrement vise à étudier la prise en charge de l'usage problématique dont le but est d'obtenir des résultats en terme d'atténuation et/ou d'élimination des problèmes liés à l'usage. Il peut s'agir de problèmes physiques, psychiques, sociaux ou professionnels.

Chaque patient n'est enregistré qu'une seule fois. Pour éviter les doublons dans l'enregistrement, nous vous enverrons tous les deux mois une liste de vos patients déjà enregistrés.

Il ne s'agit donc pas de questionner systématiquement tous les patients sur leur consommation !

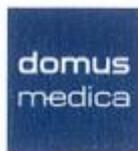
Définitions

- **Binge drinking** : consommation occasionnelle excessive d'alcool (« biture express ») : ≥ 6 unités (pour les hommes) ou ≥ 4 unités (pour les femmes) en une période de 2 heures.
 - o 1 unité d'alcool = quantité d'alcool contenue dans un verre standard (10 gr d'alcool pur).



- **Intervention brève** : s'agit d'une courte discussion face à face avec le patient, destinée à le conscientiser, lui fournir de l'information ou le faire réfléchir à des solutions au problème de consommation. L'intervention peut être informelle ou formelle, utilisant alors des techniques d'aide au changement. La durée peut varier de 30 secondes à un quart d'heure dans le contexte d'une même consultation, et l'intervention peut être répétée si nécessaire.

Vos remarques sur cette étude pilote



Huisartsenpeilpraktijken

Vlaams Ministerie van Welzijn, Volksgezondheid en Gezin - Agentschap Zorg en Gezondheid
 Fédération Wallonie - Bruxelles | Direction générale de la Santé
 Wetenschappelijk Instituut Volksgezondheid
 OD Volksgezondheid en surveillance
 Dienst Gezondheidszorgonderzoek - Dr V. VAN CASTEREN - 02/642.50.30
 J. Wytsmanstraat, 14 - 1050 Brussel
 http://www.wiv-isp.be/epidemia/medv

Société Scientifique de
 Médecine Générale



http://www.domusmedica.be

PILOOTSTUDIE / 13 mei - 13 oktober 2013

http://www.ssmg.be

PATIENTEN IN BEHANDELING VOOR PROBLEMATISCH MIDDELINGEBRUIK

Uw referentie (b.v. initialen) Geboortedatum : . / . / Geslacht : M V

Middelen die op problematische wijze gebruikt worden/werden

Recent gebruik (≤4 weken)	Vroeger gebruik (> 4 weken) <i>alleen als geen recent gebruik</i>	Aantal jaren van problematisch gebruik
<input type="checkbox"/> Alcohol (excl. binge drinking)	<input type="checkbox"/> Alcohol (excl. binge drinking)	.....
<input type="checkbox"/> Binge drinking	<input type="checkbox"/> Binge drinking	.....
<input type="checkbox"/> Cannabis	<input type="checkbox"/> Cannabis	.....
<input type="checkbox"/> Opiaten (heroïne)	<input type="checkbox"/> Opiaten (heroïne)	.....
<input type="checkbox"/> Methadone of andere substitutie	<input type="checkbox"/> Methadone of andere substitutie	.....
<input type="checkbox"/> Cocaine	<input type="checkbox"/> Cocaine	.....
<input type="checkbox"/> Ecstasy	<input type="checkbox"/> Ecstasy	.....
<input type="checkbox"/> Psychostimulantia (amfetamine)	<input type="checkbox"/> Psychostimulantia (amfetamine)	.....
<input type="checkbox"/> Hypnotica	<input type="checkbox"/> Hypnotica	.....
<input type="checkbox"/> Tranquillizers	<input type="checkbox"/> Tranquillizers	.....
<input type="checkbox"/> Pijnstillers op basis van opiaten	<input type="checkbox"/> Pijnstillers op basis van opiaten	.....
<input type="checkbox"/> Andere:	<input type="checkbox"/> Andere: .....	.....

Duid aan met welke problemen het middelengebruik gepaard gaat / ging

Fysieke problemen	Psychische problemen	Werk	Sociale problemen
<input type="checkbox"/> Letsels ongeval of geweld	<input type="checkbox"/> Depressie	<input type="checkbox"/> Relaties werkvloer	<input type="checkbox"/> Partner/Familie
<input type="checkbox"/> Gastro-intestinaal	<input type="checkbox"/> Angst	<input type="checkbox"/> Absenteïsme of te laat	<input type="checkbox"/> Gerecht
<input type="checkbox"/> Cardiovasculair	<input type="checkbox"/> Slaapproblemen	<input type="checkbox"/> Ontslagdreiging	<input type="checkbox"/> Financiering
<input type="checkbox"/> Respiratoir	<input type="checkbox"/> Suicidepoging	<input type="checkbox"/> Verandering van werkpost	<input type="checkbox"/> Isolément
<input type="checkbox"/> Geheugen-/concentratiestoornissen	<input type="checkbox"/> Suïciderisico	<input type="checkbox"/> Andere:	<input type="checkbox"/> Andere:
<input type="checkbox"/> Andere:	<input type="checkbox"/> Andere:		

Beroepsactiviteit

Is patiënt momenteel of tot zeer recent (≤4 weken) beroepsactief? Ja Neen ?
 Zo nee, waarom niet? *steeds 1 mogelijkheid*
 Werkloos Ziekteverlof Permanent werkongeschikt (RIZIV) Student
 Pensioen Zonder beroepsinkomsten Ander:

Behandeling (meerdere mogelijkheden)

	Door u zelf	Residentieel centrum voor behandeling	Ambulant centrum voor behandeling	Gespecialiseerde hulpverlener uit geestelijke gezondheidszorg (privé)
Korte interventie(s)	<input type="checkbox"/> nieuwe <input type="checkbox"/> lopende			
Niet-medicamenteuze/ psychologische begeleiding	<input type="checkbox"/> nieuwe <input type="checkbox"/> lopende			
Medicamenteuze behandeling	<input type="checkbox"/> nieuwe <input type="checkbox"/> lopende	<input type="checkbox"/> nieuwe <input type="checkbox"/> lopende	<input type="checkbox"/> nieuwe <input type="checkbox"/> lopende	
Andere behandeling:				

Is het de eerste keer dat de patiënt behandeld/begeleid wordt voor problematisch middelengebruik? Ja Neen ?

Kreeg patiënt in dit consult een verwijzing voor fysieke problemen die samengaan met het problematisch middelengebruik? Ja Neen

Kreeg patiënt van u in dit consult een voorschrift van medicatie i.v.m. het problematisch middelengebruik? Ja Neen

Zo ja, vitamine supplementen anxiolytica, hypnotica of sedativa antidepressiva
 medicatie gericht op abstinentie of reductie middelengebruik:

Week nr 20 : van 13/05 / 2013 tot 19/05 / 2013

Instructies

Wie registreren ?

Registreer bij het eerste contact in de registratieperiode, uw patiënten tussen 18 tot 64 jaar in behandeling/begeleiding voor problematisch middelengebruik (alcohol, illegale drugs, geneesmiddelen), ongeacht of u deze patiënten voor het eerst ziet of niet voor dit probleem.

De behandeling/begeleiding is inclusief nazorg of follow-up.

We geven geen precisering van de hoeveelheid of frequentie van gebruik. De registratie beoogt de behandeling/begeleiding van problematisch middelengebruik te onderzoeken waarbij het de bedoeling is tot een vermindering en/of eliminatie van de problemen verbonden aan het gebruik te komen. Het kan gaan om fysische, psychische, sociale of professionele problemen.

Elke patiënt wordt slechts 1 maal geregistreerd. Om dubbels in de registratie te vermijden, zullen wij u elke 2 maand een lijst van de door u geregistreerde patiënten overmaken.

Het gaat dus niet om een systematische bevraging van alle patiënten over hun middelengebruik !

Definities

- **Binge drinking** : occasioneel gebruik van grote hoeveelheden alcohol in een korte periode : ≥ 6 eenheden (voor mannen) of ≥ 4 eenheden (voor vrouwen) in een periode van 2 uur.
 - o 1 eenheid alcohol = hoeveelheid alcohol in een standaardglas (10 gr zuivere alcohol).



- **Korte interventie** : face to face gesprek met de patiënt, met de bedoeling hem bewust te maken, hem informatie te geven of te doen nadenken over oplossingen voor het problematisch middelengebruik. De interventie kan formeel of informeel zijn, in het eerste geval met gebruik van technieken voor verandering. De duur van de interventie kan variëren tussen 30 seconden en een kwartier, in de context van eenzelfde consultatie, en de interventie kan, indien nodig, herhaald worden.

Uw opmerkingen op deze pilootstudie

3. Avez-vous reçu des informations d'un prestataire de soins auquel le patient se serait adressé ou qui l'aurait pris en charge depuis la semaine d'enregistrement du cas?

- oui
 non
 pas d'application (patient n'était pas en traitement)

4. L'usage problématique de substances du patient a-t-il été abordé avec un membre de l'entourage du patient (conjoint, famille, ...) depuis la semaine d'enregistrement du cas?

- oui
 non
 non, pas de consentement du patient

Fin du suivi si pas de contact avec le patient au cours des 4 dernières semaines

5. Quelle était la consommation des substances par le patient lors de la dernière consultation?

	Pas (ou plus)	Réduite	Inchangée	Augmentée
Alcool (autre que binge drinking)				
Binge drinking				
Cannabis				
Opiacés (héroïne)				
Méthadone ou autre traitement de substitution				
Cocaïne				
Ecstasy				
Psychostimulants (amphétamine)				
Hypnotiques				
Tranquillisants				
Antidouleurs opiacés				
Autre :				

6. De quel type de prise en charge le patient a-t-il bénéficié pour sa consommation problématique de substances depuis la semaine d'enregistrement du cas?

- aucune

	Par vous-même	Centre résidentiel de traitement	Centre ambulatoire de traitement	Prestataire spécialisé en santé mentale (privé)
Intervention(s) brève(s)				
Prise en charge non médicamenteuse/psychologique				
Traitement médicamenteux				
Autre prise en charge				

Fin du suivi si pensionné ou invalidité permanente

7. Le patient était-il actif sur le marché du travail au cours des 4 dernières semaines?

- oui
 non
 ne sais pas

