# Optimizing Delivery of Health Care Interventions (ODHIN)

# E-guidance for primary health care providers[Ω]


## THE ODHIN CONSORTIUM*


**December 2014**

[Ω] The sister document, e-guidance for primary health care commissioners and funders can be found at: http://www.odhinproject.eu/resources/documents/odhin-project-documents/cat_view/3-odhin-project-documents/7-odhin-publications/22-odhin-e-guidance.html

*Participant organisations in ODHIN can be seen at: http://www.odhinproject.eu/partners.html


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## What is the ODHIN project?

## Alcohol, a cause for more than 200 diseases and conditions

## Identification and brief intervention for hazardous and harmful drinking

## What can be done?

- To identify hazardous and harmful drinkers
- To offer treatment to these patients

## Further reading

# The ODHIN project

The ODHIN project (Optimizing delivery of health care interventions) is a four-year project (2011-2014) involving research institutions from nine European countries co-financed under the 7th Framework Programme of the European Commission.

The general aim of the project is to improve the delivery of health care interventions by understanding how better to translate the results of clinical research into everyday practice. The research focused on the implementation of identification and brief intervention (IBI) programmes for hazardous and harmful alcohol consumption (HHAC) in primary health care (PHC).

The project addressed five questions:

1. What are general practitioners' attitudes and views to delivering screening and brief advice programmes for heavy drinking?
2. What does the published scientific literature tell to us about the best ways to improve the volume of screening and brief advice programmes for heavy drinking delivered in primary health care?
3. Can we increase the volume of screening and brief advice programmes for heavy drinking delivered in primary health care by providing training and support, financial reimbursement and the use of internet-based brief advice programmes for identified heavy drinkers?
4. How cost effective are strategies to encourage primary health care providers to deliver screening and brief advice programmes for heavy drinking?
5. How can we assess screening and brief advice programmes for heavy drinking at the country level?

**Visit the project website:**

**www.odhinproject.eu**

# The impact of alcohol

## Alcohol causes more than 200 diseases and conditions

Most of these diseases and conditions present in primary health care – thus primary health care providers cannot avoid dealing with alcohol in routine clinical practice, Box 1

***Box 1***

**Major disease and injury categories causally impacted by alcohol consumption**

**Neuropsychiatric conditions:** alcohol use disorders are the most important neuropsychiatric conditions caused by alcohol consumption. Epilepsy is another disease causally impacted by alcohol, over and above withdrawal-induced seizures. Alcohol consumption is associated with many other neuropsychiatric conditions, such as depression or anxiety disorders, but the complexity of the pathways of these associations currently prevents their inclusion in the estimates of alcohol-attributable disease burden.

**Gastrointestinal diseases:** liver cirrhosis and pancreatitis (both acute and chronic) are causally related to alcohol consumption. Higher levels of alcohol consumption create an exponential increase in risk. The impact of alcohol is so important that for both disease categories there are subcategories which are labelled as "alcoholic" or "alcohol-induced" in the ICD.

**Cancers:** alcohol consumption has been identified as carcinogenic for the following cancer categories cancer of the mouth, nasopharynx, other pharynx and oropharynx, laryngeal cancer, oesophageal cancer, colon and rectum cancer, liver cancer and female breast cancer. In addition, alcohol consumption is likely to cause pancreatic cancer. The higher the consumption, the greater the risk for these cancers, with consumption as low as one drink per day causing significantly increased risk for some cancers, such as female breast cancer.

**Intentional injuries:** alcohol consumption, especially heavy drinking, has been causally linked to suicide and violence.

**Unintentional injuries:** almost all categories of unintentional injuries are impacted by alcohol consumption. The effect is strongly linked to the alcohol concentration in the blood and the resulting effects on psychomotor abilities. Higher levels of alcohol consumption create an exponential increase in risk.

**Cardiovascular diseases (CVD):** the relationship between alcohol consumption and cardiovascular diseases is complex. The beneficial cardioprotective effect of relatively low levels of drinking for ischaemic heart disease and ischaemic stroke disappears with heavy drinking occasions. Moreover, alcohol consumption has detrimental effects on hypertension, atrial fibrillation and haemorrhagic stroke, regardless of the drinking pattern.

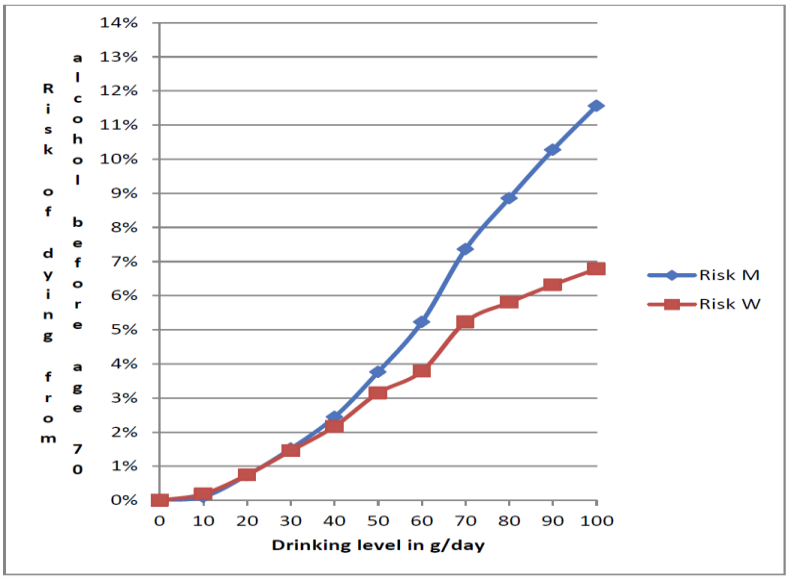
**Fetal alcohol syndrome (FAS) and preterm birth complications:** alcohol consumption by an expectant mother may cause these conditions that are detrimental to the health of a newborn infant.

**Diabetes mellitus:** a dual relationship exists, whereby a low-risk pattern of drinking may be beneficial while heavy drinking is detrimental.

**Infectious diseases:** harmful use of alcohol weakens the immune system thus enabling development of pneumonia and tuberculosis. This effect is markedly more pronounced when associated with heavy drinking, and there may be a threshold effect, meaning that disease symptoms manifest mainly if a person drinks above a certain level of heavy drinking.

At an intake of 20 grams of alcohol a day (similar to two standard drinks), 1 in 100 people will die before the age of 70 years due their alcohol consumption. Beyond 30 grams of alcohol a day, men are more likely to die than women for any given level of alcohol consumption. Reducing alcohol consumption reduces the subsequent risk of an alcohol caused death.

***Figure 1*** *Risk of dying prematurely (up to age 70) due to alcohol consumption by drinking level in grams of pure alcohol per day Source: (Rehm et al. 2014).*




M = men
W = women

**Alcohol increases the risk of dying before the age of 70 years in a more or less dose response relationship**

# Identification and brief intervention for hazardous and harmful drinking

**Brief advice (IBI) from a primary health care provider is effective in reducing heavy drinking**

On average, brief advice reduces consumption by 38 grams of alcohol (four drinks) per week over and above control conditions from a pre-advice level of 313 grams (31 drinks) per week - a 12% reduction).

**Brief advice is effective in reducing premature death**

Brief advice studies to reduce heavy drinking also find reductions in all-cause mortality, with a difference in reduction of 18.3 g of pure alcohol per day between experimental and control groups associated with a 43% reduction in mortality (McQueen et al 2011).

**Screening and giving brief advice delivered in primary health care is cost-effective**

Screening and giving brief advice is cost effective when delivered both at next consultation and at next patient registration. When delivered at next patient registration, screening and brief advice is, in some jurisdictions, cost-saving.

**Despite the health burden and evidence for effectiveness and cost effectiveness, screening and brief advice for heavy drinking is rarely delivered.**

The ODHIN study found that in five European jurisdictions (Catalonia, England, Netherlands, Poland and Sweden), only 11 per thousand adult patients who consulted their primary health care doctor were given brief advice for heavy drinking, an estimated 1 in 30 of those who could have benefited from such advice.

# Guidance for clinical practice

**Who should be offered brief advice for heavy drinking?**
Advice is indicated for all adults who have been identified via a validated screening tool as positive cases.

**How should heavy drinkers be identified?**
Practitioners may use any contact with clients to carry out identification, on both a universal basis (for example, during new patient registrations), and targeted basis (for instance, by focusing on groups that may be at an increased risk of harm from alcohol and/or those with an alcohol-related condition, such as the middle-aged, or those with hypertension). The recommended identification instrument is the 3 item AUDIT-C, Box 2. The recommended cut-off level for the 3 item AUDIT-C can be 5 (a positive score is 5 or more) when based on country guidelines, 6 when based on a 1 in 100 risk of an alcohol-related death before the age of 70 years, or 8 when based on the results of primary health care based clinical trials testing the effectiveness of brief advice.

***Box 2** AUDIT-C*

| AUDIT-C Questions: | Scoring system | | | | | Your score: |
|---|---|---|---|---|---|---|
| | **0** | **1** | **2** | **3** | **4** | |
| How often do you have a drink containing alcohol? | Never | Monthly or less | 2 - 4 times per month | 2 - 3 times per week | 4+ times per week | |
| How many units of alcohol do you drink on a typical day when you are drinking? | 1 -2 | 3 - 4 | 5 – 6 | 7 - 9 | 10+ | |
| How often do you have 6 or more units on one occasion? | Never | Less than monthly | Monthly | Weekly | Daily or almost daily | |
| | | | | | Total: | |

**Brief advice is indicated for all adults identified as a positive case using a validated screening tool**

## What should brief advice consist of?

Where clients screen positive with the AUDIT-C (or clinical presentation), all practitioners should provide a session of structured brief advice on alcohol using a recognised, evidence-based resource built on the FRAMES principles and the Five As (Miller & Sanchez 1993).

**FRAMES** is an acronym summarising the key components of brief advice: **F**eedback (on the client's risk of having alcohol problems); **R**esponsibility (change is the client's responsibility); **A**dvice (provision of clear advice when requested); **M**enu (what are the options for change?); **E**mpathy (an approach that is warm, reflective and understanding); and **S**elf-efficacy (optimism about the behaviour change). **The five As** are: (1) *assess* alcohol consumption with a brief screening tool, followed by clinical assessment as needed; (2) *advise* patients to reduce alcohol consumption to lower levels; (3) *agree* on individual goals for reducing alcohol use or abstinence (if indicated); (4) *assist* patients in acquiring the motivations, self-help skills or support needed for behaviour change; and, (5) *arrange* follow-up support and repeated counselling, including the referral of dependent drinkers to specialty treatment (Whitlock et al. 2002).

Structured brief advice should take 5–10 minutes and should: cover the potential harm caused by the 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); and lead to a set of goals. Where there is an on-going relationship with the patient or client, practitioners should routinely monitor their progress in reducing their alcohol consumption to a low-risk level. Where required, an additional session of structured brief advice can be offered or, if there has been no response, an extended brief intervention can be offered. Patients can be referred and encouraged to use available web-based, computer-based and mobile applications to support them in their behaviour change.

**Who should receive extended advice?**

Adults who have not responded to brief structured advice on alcohol may require extended advice from specifically trained practitioners. This could take the form of motivational interviewing or motivational enhancement therapy. Sessions should last from 20 to 30 minutes and 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. People who have received an extended brief advice should be followed up and assessed. It may be necessary to offer up to four additional sessions of extended advice, or to refer patients to a specialist alcohol treatment service.

**Who should be referred to a specialist?**

Patients can be considered for referral to specialist treatment if one or more of the following has occurred: have failed to benefit from structured brief advice and extended brief advice and wish to receive further help for an alcohol problem; show signs of severe alcohol-related impairment or have a related comorbid condition (for example, liver disease or alcohol-related mental health problems).

**Structured brief advice should take between 5 and 10 minutes**

## What else can primary health care providers do?

**Get training:** There is a wealth of evidence that training makes it easier to deliver screening and brief advice programmes and results in more patients being advised. It is thus important to attend an accredited training programme on delivering screening and brief advice for heavy drinking. It does not have to be extensive training - probably a 2-4 hour course is enough.

**Lobby for financial reimbursement**: There is evidence, although much less than for training, that quite modest financial reimbursement leads to primary health care providers delivering more screening and brief advice programmes. The ODHIN study found that a combination of training and support and financial reimbursement trebled the number of patients in primary heath care who were given brief advice for their heavy drinking.

# Further reading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**ODHIN project documents**