Module 2.3

Brief interventions for harmful alcohol use at primary health care level
WHAT’S INSIDE

- Introduction
- Learning outcomes
- Topics covered
- Competency
- Teaching and learning activities
- Background information
INTRODUCTION

Worldwide, 3.3 million deaths every year result from harmful use of alcohol, this represent 5.9 % of all deaths. It is important that primary health teams are able to record drinking history, identify people with drinking problems, and provide appropriate advice to regular drinkers about the health risks and advise them to cut down. They should also advice to the patients with a hazardous level of alcohol consumption or early signs of alcohol-related problems and urge them to cut down their consumption to an agreed, realistic lower level of drinking which may include abstinence and follow up their progress to strengthen motivation. The module contains practical training for primary health care workers to screen alcohol users and deliver brief interventions using the 5A’s and 5R’s techniques in the primary health care setting.

LEARNING OUTCOMES

At the end of the session, participants will be able to:

- Use brief intervention techniques to screen and assist individuals with hazardous and harmful drinking habits.
- Screen and refer individuals with alcohol dependence at an early stage.
- Use communication skills to motivate drinkers to address their drinking problem.

TOPICS COVERED

- Alcohol use disorders (AUD): hazardous/harmful drinking and alcohol dependence.
- Screening for problem drinking using the alcohol use disorder identification test (AUDIT) – scoring and interpretation.
- 5A’s and 5R’s techniques.
- Referral mechanisms for persons with AUD.

COMPETENCY

- Ability to identify alcohol use disorders and provide brief advice.
TEACHING AND LEARNING ACTIVITIES

Total session time: 90 minutes

Activity 1. Basics of alcohol use: 15 minutes

Step 1. Ask the participants to briefly respond to the following questions. Write their responses on a flip chart/white board.

- What are the types of alcoholic drinks available in your country and locality?
- Is alcohol use a problem in your country and locality?
- Is there any safety limit to consumption of alcoholic drinks?
- What are the effects of harmful use of alcohol on physical, psychological, occupational, financial, familial and legal aspects?
- What are your experiences in managing persons with alcohol use disorders in your clinical practice?
- Under what conditions certain individuals should be advised complete abstinence?
- What resources are available at health facilities to provide services for alcohol use disorders?

Step 2. Summarize the discussion by presenting the powerpoint slides.

Activity 2. Estimating the amount of alcohol in an alcoholic drink: 20 minutes

Step 1. Start with the following statement:

- Alcohol content in a drink will depend on the volume of the container and the strength of the drink. There are wide variations in the strength of alcoholic beverages and drink sizes commonly used in countries. Therefore, it is essential to adapt drinking sizes to what is most common at the local level and to know roughly how much pure alcohol the person consumes per occasion and on average.
- Another consideration in measuring the amount of alcohol contained in a standard drink is the conversion factor of ethanol. That allows you to convert any volume of alcohol into grams. For each milliliter of ethanol, there are 0.79 of pure ethanol.

Step 2. Formula to calculate standard drink:

Vol. in litre X % of alc. X 0.789 = _______________
Step 3. Calculate the number of standard drinks in alcoholic beverages below.

- 750 ml of 8% beer
- 1 can of beer (330 ml) at 5% strength
- 1 glass of wine (140 ml) at 12% strength
- 1 shot of spirit (40 ml) at 40% strength
- homebrewed/locally brewed or country liquor

Using the above formula, a bottle of beer (650ml) with 8% alcohol will come to:

\[ 0.650 \times 8 \times 0.789 = 4.1028 \], that is 4 standard drinks.

1 peg of hard drink = 60ml (0.06 litre), therefore it will work out to be \( 0.06 \times 42 \times 0.789 = 2 \) standard drinks in a peg.

One standard drink

- 30 ml (half peg) of hard drink (42%)
- 162.5 ml (one quarter bottle) of beer (8%)
- 50 ml of arak\(^1\) (approx. 25%)
- 250 ml of 5% beer
- 72 ml of wine (18%)

Allowable or safe limit *(caution: it is always better to avoid alcohol at all. Drinking daily can lead to tolerance and subsequently to addiction):*

- 3 standard drinks per day for men for not more than 5 days a week.
- 2 standard drinks per day for women not more than 5 days a week.

People who drink occasionally but in large quantity are called binge drinkers and they are at equal risk for alcohol-related health problems as habitual drinkers.

Activity 3. Screening for alcohol use disorders: 20 minutes

Step 1. Start with following statement:

Screening is used to identify who is at risk of having a specific health condition. However, it does not provide a diagnosis. Screening for alcohol is used to identifying individuals with alcohol use disorder or at the risk of developing alcohol use problems. Among many alcohol screening tools, in this training the AUDIT tool which is validated in many countries, will be used.

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\(^1\) Arak is a distilled alcoholic drink typically produced in the Indian Subcontinent and Southeast Asia, made from either the fermented sap of coconut flowers, sugarcane, grain (e.g. red rice) or fruit, depending upon the country of origin.
The Alcohol Use Disorder Identification Test (AUDIT) is a 10-item screening tool to assess alcohol consumption, drinking behaviours and alcohol-related problems. There is a clinician-administered and self-report version of AUDIT. Patients should be encouraged to answer the AUDIT questions in terms of standard drinks. The AUDIT-C, a 3-item modified version of the 10 question AUDIT can also be used in busy clinic settings. There are also other tools such as the CAGE (cut down, angry, guilty, eye-opener) that can be used for screening AUD.

**Step 2. Refer to the AUDIT tool in your workbook and discuss how to administer the tool.**

### The Alcohol Use Disorders Identification Test: Interview Version

Read questions as written. Record answers carefully. Begin the AUDIT by saying “Now I am going to ask you some questions about your use of alcoholic beverages during this past year.” Explain what is meant by “alcoholic beverages” by using local examples of beer, wine, vodka, etc. Code answers in terms of “standard drinks”. Place the correct answer number in the box at the right.

<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
<th>Box 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How often do you have a drink containing alcohol?</td>
<td>(0) Never [Skip to Qs 9-10]</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(1) Monthly or less</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(2) 2 to 4 times a month</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(3) 2 to 3 times a week</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(4) 4 or more times a week</td>
<td>□</td>
</tr>
<tr>
<td>6. How often during the last year have you needed a first drink in the morning to get yourself going after a heavy drinking session?</td>
<td>(0) Never</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(1) Less than monthly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(2) Monthly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(3) Weekly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(4) Daily or almost daily</td>
<td>□</td>
</tr>
<tr>
<td>2. How many drinks containing alcohol do you have on a typical day when you are drinking?</td>
<td>(0) 1 or 2</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(1) 3 or 4</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(2) 5 or 6</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(3) 7, 8, or 9</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(4) 10 or more</td>
<td>□</td>
</tr>
<tr>
<td>7. How often during the last year have you had a feeling of guilt or remorse after drinking?</td>
<td>(0) Never</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(1) Less than monthly</td>
<td>□</td>
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<tr>
<td></td>
<td>(2) Monthly</td>
<td>□</td>
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<td></td>
<td>(3) Weekly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(4) Daily or almost daily</td>
<td>□</td>
</tr>
<tr>
<td>3. How often do you have six or more drinks on one occasion?</td>
<td>(0) Never</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(1) Less than monthly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(2) Monthly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(3) Weekly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(4) Daily or almost daily</td>
<td>□</td>
</tr>
<tr>
<td>Skip to Questions 9 and 10 if Total Score for Questions 2 and 3 = 0</td>
<td></td>
<td>□</td>
</tr>
<tr>
<td>8. How often during the last year have you been unable to remember what happened the night before because you had been drinking?</td>
<td>(0) Never</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(1) Less than monthly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(2) Monthly</td>
<td>□</td>
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<tr>
<td></td>
<td>(3) Weekly</td>
<td>□</td>
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<tr>
<td></td>
<td>(4) Daily or almost daily</td>
<td>□</td>
</tr>
<tr>
<td>4. How often during the last year have you found that you were not able to stop drinking once you had started?</td>
<td>(0) Never</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(1) Less than monthly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(2) Monthly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(3) Weekly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(4) Daily or almost daily</td>
<td>□</td>
</tr>
<tr>
<td>9. Have you or someone else been injured as a result of your drinking?</td>
<td>(0) No</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(2) Yes, but not in the last year</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(4) Yes, during the last year</td>
<td>□</td>
</tr>
<tr>
<td>5. How often during the last year have you failed to do what was normally expected from you because of drinking?</td>
<td>(0) Never</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(1) Less than monthly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(2) Monthly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(3) Weekly</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(4) Daily or almost daily</td>
<td>□</td>
</tr>
<tr>
<td>10. Has a relative or friend or a doctor or another health worker been concerned about your drinking or suggested you cut down?</td>
<td>(0) No</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(2) Yes, but not in the last year</td>
<td>□</td>
</tr>
<tr>
<td></td>
<td>(4) Yes, during the last year</td>
<td>□</td>
</tr>
</tbody>
</table>

Record total of specific items here □

2 The three questions of the AUDIT-C include the first three questions of the 10 question AUDIT instrument. The AUDIT-C is scored on a scale of 0-12.
Step 3. Identifying types of drinkers using AUDIT test.

**Drinkers pyramid**

Step 5. Ask participants to calculate the AUDIT score and identify types of drinkers (abstainers, low-risk drinkers, high-risk drinkers, probable-alcohol dependence) in the case studies below.

<table>
<thead>
<tr>
<th>Case</th>
<th>AUDIT score</th>
<th>Type of drinker</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Bahadur is a 35-year-old father of three children. He has a government job. After office, he goes to a small shop to drink and comes home drunk quite often. He is often late and has not been helpful lately guiding his children in their school assignments. He relapsed after attempting to quit many times. Now he has gone to his old habit of drinking from the day break.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Case AUDIT score Type of drinker

<table>
<thead>
<tr>
<th>Case</th>
<th>AUDIT score</th>
<th>Type of drinker</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Penjor, a father of two children, is a hard-working farmer. He comes home in the evening after a day of hard labour. Before dinner, almost every day, he drinks 100 ml of whisky to get over his tiredness.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Pedro drinks when he meets his group of best friends. His friends usually meet about 2–3 times a year. The last meeting was two months ago when he drank six bottles of 750 ml beer in one evening. He was too drunk to drive back home. His friends helped him reach home.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Ms Usha drinks during social occasions. The last time she had an alcoholic drink was a bottle of beer at a friend’s house two months ago.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Activity 4. Communicating the results of the AUDIT test:**

**15 minutes**

**Step 1. Communicate AUDIT score to patients through role play:**

- Work in pairs with one becoming a patient and the other a primary health care worker.
- Use the above mentioned four cases and the results of the AUDIT scores.
- Primary health care worker will communicate the results of the AUDIT test.
## AUDIT score and its interpretation

<table>
<thead>
<tr>
<th>AUDIT score</th>
<th>Intervention</th>
<th>Actions to be considered</th>
</tr>
</thead>
</table>
| 0–7         | Alcohol education                                | - No intervention required  
- Individual alcohol advice to provide information about the risks of drinking  
- Patients should also be praised for their current low-risk practices and reminded that, if they do drink, they should stay within the recommended allowances  
- Patients should be reminded about the standards drinks and the limits (see above)  
- Congratulate patients for their adherence to the guidelines. |
| 8–15        | Simple advice                                    | - Inform them that  
  - They are at risk of chronic health conditions due to regular alcohol use in excess of drinking guidelines  
  - They are at risk of injury, violence, legal problems, poor work performance, or social problems due to episodes of acute intoxication. |
| 16–19       | Simple advice plus brief counseling and continued monitoring | - Give brief advice  
- The specific harm(s) (both identified by the AUDIT and from the patient’s presenting symptoms) should be itemized, and the seriousness of the situation should be emphasized  
- Provide counselling based on the stage of change model (refer to *Standard treatment and counseling guideline for alcohol and substance dependence*). |
| 20–40       | Referral to specialist for diagnostic evaluation and treatment | - These patients should be referred to a specialist (if available) for diagnostic evaluation and possible treatment for alcohol dependence. |
Activity 5. Brief alcohol interventions in primary health care settings: 15 minutes

Step 1. Ask participants the following questions:

What can primary health workers do to support individuals with a drinking problem? Possible responses: screen and counsel; referral in case of alcohol dependence.

What are the commonest concerns and misconceptions about brief alcohol interventions in the primary health care setting. Ensure that key points listed below are discussed:
- lack of time
- inadequate training
- fear of antagonizing patients over sensitive personal issue
- alcohol is not a matter that needs to be addressed in primary health care
- alcoholics do not respond to primary health care interventions.

Step 2. Ask the participants to review the 5A’s and 5R’s brief interventions to screen harmful use of alcohol and inform them that they will need to use it in the subsequent activity.

<table>
<thead>
<tr>
<th>5A’s</th>
<th>Alcohol</th>
</tr>
</thead>
</table>
| ASK  | Do you ever drink alcohol?  
|      | Yes      | No |
|      | If Yes:  
|      | - How often do you have an alcoholic drink?  
|      | - How many alcoholic drinks do you have on a usual day when you are drinking?  
| ADVISE | For people drinking fewer than 2 units (according to local drink strengths and commonly available sizes) per day and drinking on 5 or fewer days per week, inform them of the following:  
|      | - Use of alcohol can increase the risk of having a heart attack or stroke.  
|      | - It also increases the risks of getting certain cancers and can cause damage to other parts of the body.  
|      | - Overall, the best way to avoid the health risks of alcohol use is to abstain.  
|      | - If you do drink alcohol, keep in mind that “less is better”.  
|      | - Avoid having more than two units on any single day and do not drink any alcohol on at least two days per week.  
|      | - Do not drink alcohol for “health” reasons.  
|      | - Do not use alcohol when you are:  
|      |   - driving  
|      |   - operating machinery  
|      |   - pregnant or breastfeeding  
|      |   - taking medications that interact with alcohol.  
|      |   - living with medical conditions that are made worse by alcohol  
|      |   - having difficulties controlling how much you drink.  

121

Brief interventions for harmful alcohol use at primary health care level

<table>
<thead>
<tr>
<th>5A’s</th>
<th>Alcohol</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASSESS</strong></td>
<td>For people who drink two or more units per day, who drink on more than five days per week and/or have any indication that alcohol could potentially be a problem, say:</td>
</tr>
<tr>
<td></td>
<td>¤ “Your drinking habits could be harmful to your health.</td>
</tr>
<tr>
<td></td>
<td>¤ May I ask you a few more questions to have a better idea of the possible risks?”</td>
</tr>
<tr>
<td></td>
<td>Yes  No</td>
</tr>
<tr>
<td><strong>ASSIST and ARRANGE</strong></td>
<td>If No:</td>
</tr>
<tr>
<td></td>
<td>¤ Give brief advice. End the discussion positively by saying, “This can be a difficult issue to discuss but I am here to help you.”</td>
</tr>
<tr>
<td></td>
<td>¤ Provide health education materials and information about additional resources such as help lines, counselling, support groups.</td>
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<tr>
<td></td>
<td>¤ At the next visit, repeat the brief intervention.</td>
</tr>
<tr>
<td></td>
<td>If Yes:</td>
</tr>
<tr>
<td></td>
<td>¤ Give brief advice and refer for further counselling and tests (for which further training, tools and resources are required). See AUDIT test (link below). The score will determine next steps.</td>
</tr>
</tbody>
</table>

Using 5R’s in patient counselling

<table>
<thead>
<tr>
<th>Strategies for implementation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Relevance</strong></td>
<td>Encourage the patient to indicate how abstaining or reducing alcohol is personally relevant to him or her. Motivational information has the greatest impact if it is relevant to a patient’s disease status or risk, family or social situation (e.g. having children in the home), health concerns, age, sex, and other important patient characteristics (e.g. prior quitting experience, personal barriers to cessation).</td>
</tr>
<tr>
<td></td>
<td>Health care worker (HCW): “How is quitting most personally relevant to you?” Patient (P): “I suppose alcohol is bad for my health”</td>
</tr>
</tbody>
</table>

1 AUDIT score levels and recommendations should be adapted to country context.
<table>
<thead>
<tr>
<th>Strategies for implementation</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Risks</strong></td>
<td>Encourage the patient to identify potential negative consequences of alcohol consumption that are relevant to him or her. Examples of risks are: - Liver disease, cancers, liver failure, heart attacks and strokes, osteoporosis, long-term disability, and need for extended care.</td>
</tr>
<tr>
<td></td>
<td>HCW: “What do you know about the risks of alcohol to your health? What particularly worries you?” P: “I know it causes liver failure. That must be awful.” HCW: “That’s right – the risk of liver failure is many times higher among alcoholics.”</td>
</tr>
<tr>
<td><strong>Rewards</strong></td>
<td>Ask the patient to identify potential relevant benefits of stopping alcohol consumption. Examples of rewards could include: - improved health - food will taste better; increase appetite - improved sense of smell - saving money - feeling better about oneself - setting a good example for children - having healthier babies and children - feeling better physically - performing better in physical activities.</td>
</tr>
<tr>
<td></td>
<td>HCW: “Do you know how stopping alcohol would affect your risk of liver disease?” P: “I guess it would be lower if I abstain.” HCW: “Yes, and it doesn’t take long for the risk to decrease. But it’s important to abstain or minimize as soon as possible.”</td>
</tr>
</tbody>
</table>
## Strategies for implementation

<p>| | |</p>
<table>
<thead>
<tr>
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</table>
| **Roadblocks** | Ask the patient to identify barriers or impediments to quitting and provide treatment (problem-solving counselling, medication) that could address barriers. Typical barriers might include:  
  - withdrawal symptoms  
  - fear of failure  
  - lack of support  
  - depression  
  - enjoyment of alcohol  
  - being around other alcohol users  
  - limited knowledge of effective treatment options. |
|   | HCW: “So what would be difficult about quitting for you?”  
P: “Cravings – they would be awful!”  
HCW: “We can help with that. We will need to provide in-patient care to overcome alcohol dependence.”  
P: “Does that really work?”  
HCW: “You still need willpower, but study shows that cessation activities under medical supervision can double your chances of quitting successfully.” |
| **Repetition** | Repeat assessment of readiness to quit. If still not ready to quit, repeat intervention at a later date. The motivational intervention should be repeated every time an unmotivated patient visits the clinic setting. |
|   | HCW: “So, now we’ve had a chat, let’s see if you feel differently. Can you answer these questions again...?” (Go back to the Assess stage of the 5A’s. If ready to quit then proceed with the 5A’s. If not ready to quit, end intervention positively.) |
Activity 6. Role play using the 5A’s and 5R’s brief intervention:
20 minutes

Step 1. Divide the participants into convenient group and ask them to refer to the case study in the workbook:

Case study: Mahesh Babu is the 35-year-old father of three children. He has a government job. After his office hours, he usually goes to a small shop to drink and comes home late in the evening often drunk. He relapsed after attempting to quit many times. He started drinking from daybreak to stabilize himself at the shop.

Step 2. Ask groups to identify two volunteers.
¤ Volunteer 1 act as Mahesh Babu.
¤ Volunteer 2 act as the primary health care worker.

The other participants are the observers while the two volunteers conduct the brief intervention session. Ask the observers to note the brief intervention session and provide the feedback at the end of the session addressing the following questions:
¤ Was the brief intervention appropriate?
¤ What microskills did the primary health care worker use?
¤ Were 5A’s adequately employed?
¤ How could the healthcare worker have improved the brief interventions?

Step 3. Using 5R’s interventions to improve motivation
¤ Ask volunteer 1 to continue as a client and this time to exhibit low motivation to change the habit.
¤ Invite the third volunteer to be the healthcare worker and use the 5R’s interventions to motivate the patient.
¤ The other participants are the observers. Ask the observers to note the intervention session and provide feedback at the end of the session addressing the following questions:
¤ Was the brief intervention appropriate?
¤ What skills did the healthcare worker use?
¤ Were the 5R’s adequately employed?
¤ How could the healthcare worker have improved the motivation of the patient?
Optional activity. Population-level alcohol control interventions

Step 1. Alcohol taxation, promotion and advertisement, trading and licensing restrictions, minimum age of sale, legal drinking age and drink driving law are a few common population-wide alcohol control interventions.

Step 2. Ask the participants to discuss the following questions:

- How well are these interventions implemented in their country?
- Share examples of alcohol industry’s influence on policy-making?
- List few recommendations in each area to improve the implementation of alcohol control interventions. What would you do to improve the implementation of alcohol control in your community/country?
BACKGROUND INFORMATION

Effects of high-risk drinking

High-risk drinking may lead to social, legal, medical, domestic, job and financial problems. It may also cut your lifespan and lead to accidents and death from drunken driving.

Role of health-care workers

- Routinely ask all adolescents and adults who consult primary health care services for any reasons about their drinking habits.
- Ask patient presenting with disorders such as hypertension and depression about their alcohol consumption.
- Record the drinking history of all patients who consume alcohol regularly.
- Inform regular drinkers of the associated health risks and advise them to cut down.
Give advice to the patients with a hazardous level of alcohol consumption or early signs of alcohol-related problems, urging them to cut down their consumption to an agreed, realistic lower level of drinking (which may include abstinence) and follow up on their progress to strengthen motivation.

Conduct brief interviews, particularly with patients with harmful alcohol consumption and alcohol-related problems, and assist them in changing their behaviour.

Refer the patients who show signs of dependence or serious physical illness as a result of their alcohol consumption to specialized services.

Serve yourself as a positive model.

Screen for and respond to alcohol use disorders and refer appropriately to local services.

**Harmful use of alcohol**

The harmful use of alcohol is a risk factor for many negative health and social consequences. For most diseases and conditions, the risk of harm increases steadily with increasing alcohol consumption.

**What is harmful use of alcohol?**

Harmful use of alcohol, when defined as a public health problem, refers to “drinking that causes detrimental health and social consequences for the drinker, the people around the drinker and society at large, as well as the patterns of drinking that are associated with increased risk of adverse health outcomes” (see Box for further explanation).

Harmful use includes high-level drinking each day as well as single or repeated episodes of drinking to intoxication.

The risks related to alcohol are linked to the pattern of drinking, the amount of alcohol consumed and, sometimes, the quality of the alcohol consumed. The risk of harm from a given level of alcohol consumption varies between individuals according to factors including age, sex, gender, body mass, and contextual and social factors. The risks should, therefore, be assessed by health workers on an individual basis. There is no definition for “safe” or “non-harmful” use of alcohol. However, people are generally considered to be at lower risk for negative consequences of alcohol use if they drink no more than 2 standard drinks of alcohol per day and do not drink on at least 2 days of the week. People drinking above these levels but not yet experiencing alcohol-related harm can be described as “hazardous drinkers” (see Box 1).

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3 The word “harmful” in this module refers only to public health effects of alcohol consumption, without prejudice to religious beliefs and cultural norms.
**Box 1: “Harmful” and “hazardous” use of alcohol, and “alcohol dependence”**

“Harmful use of alcohol”, as a diagnosis, refers to a pattern of use that causes damage to physical and mental health.

“Hazardous use of alcohol” refers to a pattern of use that has not damaged the health of the individual drinker, but increases the risk of health and social consequences to the drinker and people around them.

“Alcohol dependence” is one of the health consequences of harmful use of alcohol. Alcohol dependence develops after repeated alcohol use and includes a strong desire to consume alcohol, difficulties in controlling its use, persisting in its use despite harmful consequences, a higher priority given to alcohol use than to other activities and obligations, increased tolerance, and sometimes a physiological withdrawal state. In earlier disease classifications, and sometimes in common language, alcohol dependence has been referred to as “alcoholism”. However the term “alcohol dependence” is more precise and can be more reliably defined, diagnosed and measured.

ICD-10 Classification of Mental and Behavioural Disorders (WHO, 1992)

The alcohol content of a drink depends on the strength of the drink (% alcohol) and the volume of the container. There are wide variations in the strengths of alcoholic drinks and in the drink sizes used in different countries. Therefore, when providing health information on alcohol use, it is essential to define “a drink” according to what is most common in the local context.

**Alcohol unit calculator**

One unit of alcohol, measured as 10 g of pure alcohol, is equivalent to approximately 250 ml of beer/lager (5% alcohol) or 100 ml of wine (12% alcohol) or 30 ml of spirits (40% alcohol).

**What are the risks of harmful use of alcohol?**

High levels of alcohol consumption and regular heavy episodic drinking are clearly associated with increased risk of cardiovascular disease. There are also indications of an increased risk among average light to moderate drinkers who have irregular heavy drinking episodes. Harmful use of alcohol damages the heart muscle, increases the risk of stroke and can cause cardiac arrhythmia. While drinking at low levels without any episodes of heavy drinking may be associated with a reduced CVD risk in some people, overall alcohol consumption is associated with multiple health risks that may outweigh potential benefits. Other health risks include: liver cirrhosis, pancreatitis, neuropathy, encephalopathy, sexually transmitted diseases, impotence, unintended pregnancy, fetal
alcohol disorders, sudden infant death syndrome, violence, suicide and unintentional injuries, e.g. motor vehicle accidents. Like tobacco, alcohol can have a marked impact on the health of those other than the alcohol user.

Brief interventions in primary care have been shown to be useful in identifying and managing people with alcohol problems. However, the 5A’s brief intervention on harmful use of alcohol in this module should be used only to screen for potential harmful use, provide basic information on the harmful effects of alcohol, and provide a link to other WHO tools.

**ICD-10 Criteria for the Alcohol Dependence Syndrome**

Three or more of the following manifestations should have occurred together for at least one month or, if persisting for periods of less than one month, should have occurred together repeatedly within a 12-month period:

- a strong desire or sense of compulsion to consume alcohol;
- impaired capacity to control drinking in terms of its onset, termination, or levels of use, as evidenced by: alcohol being often taken in larger amounts or over a longer period than intended; or by a persistent desire to or unsuccessful efforts to reduce or control alcohol use;
- a physiological withdrawal state when alcohol use is reduced or ceased, as evidenced by the characteristic withdrawal syndrome for alcohol, or by use of the same (or closely related) substance with the intention of relieving or avoiding withdrawal symptoms;
- evidence of tolerance to the effects of alcohol, such that there is a need for significantly increased amounts of alcohol to achieve intoxication or the desired effect, or a markedly diminished effect with continued use of the same amount of alcohol;
- preoccupation with alcohol, as manifested by important alternative pleasures or interests being given up or reduced because of drinking; or a great deal of time being spent in activities necessary to obtain, take, or recover from the effects of alcohol; and
- persistent alcohol use despite clear evidence of harmful consequences, as evidenced by continued use when the individual is actually aware, or may be expected to be aware, of the nature and extent of harm.

**Additional reading resources**

- Management of alcohol use disorders in primary care, Iain D Smith and Caroline Woolston.
- HEARTS Healthy lifestyle counseling for tobacco cessation, diet, physical activity, alcohol use and self-care to prevent cardiovascular disease.
- WHO Global Strategy to Reduce the Harmful Use of Alcohol (WHO, 2010a).
Brief interventions for harmful alcohol use at primary health care level

Activity 1: Step 2

Alcohol problem

- Harmful use of alcohol is a causal factor in more than 200 diseases and injuries
- 5.1% of the global disease burden is due to the harmful use of alcohol
- Estimated 3.3 million people die from alcohol related conditions.
Brief interventions for harmful alcohol use at primary health care level

Effects of alcohol

Behavioural effects

<table>
<thead>
<tr>
<th>Blood level, g/dL</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.02</td>
<td>Decreased inhibitions, a slight feeling of intoxication</td>
</tr>
<tr>
<td>0.08</td>
<td>Decrease in complex cognitive functions and motor performance</td>
</tr>
<tr>
<td>0.20</td>
<td>Obvious slurred speech, motor incoordination, irritability, and poor judgement</td>
</tr>
<tr>
<td>0.30</td>
<td>Light coma and depressed vital signs</td>
</tr>
<tr>
<td>0.40</td>
<td>Death</td>
</tr>
</tbody>
</table>

Breath alcohol concentration and impairment

https://pubs.niaaa.nih.gov/publications/AcoholOverViewFactSheet/OverviewFact.htm

Brief interventions for harmful alcohol use at primary health care level
Taking alcohol use history

• **When asking about alcohol consumption:**
  • Ask about the level and pattern of consumption of alcohol, as well as any behaviours associated with alcohol use that may risk the person’s health and the health of others (i.e., where, when and with whom alcohol consumption typically occurs, what triggers alcohol consumption, activities when intoxicated, financial implications, capacity to care for children, and violence towards others).
  • Ask about harms from alcohol, including:
    – accidents, driving while intoxicated
    – relationship problems
    – medical problems such as liver disease / stomach ulcers
    – legal / financial problems
    – sex while intoxicated and that is later regretted or risky
    – alcohol-related violence including domestic violence

Taking alcohol use history

• **When asking about alcohol consumption:**
  • If there is evidence of hazardous or harmful alcohol use, investigate dependence by asking about the development of tolerance, withdrawal symptoms, use in greater amounts or over a greater length of time than was intended, continued alcohol use in the face of problems related to it, difficulty in stopping or cutting down alcohol use, and craving for alcohol use.
  • Ask about social networks and the person’s alcohol and other drug consumption patterns

Looking for pattern consumption and alcohol-related harm

• **Ask if the person consumes alcohol in a way that puts them at risk of harm:**
  • **Drinking quantity and frequency**
    – Has consumed 5 or more standard drinks (or 60 g alcohol)* on any given occasion in the last 12 months
    – Drinks on average more than two drinks per day
    – Drinks every day of the week
Talking to people about the reasons they use alcohol

- Engage the person in a discussion about their alcohol use in a way that he/she is able to talk about both the perceived benefits of it and the actual and/or potential harms, taking into consideration the things that are most important to that person in life.
- Steer the discussion towards a balanced evaluation of the positive and negative effects of alcohol by challenging overstated claims of benefits and bring up some of the negative aspects which are perhaps being understated.
- Avoid arguing with the person and try to phrase something in a different way if it meets resistance – seeking to find understanding of the real impact of alcohol in the person’s life as much as is possible for the person at that time.
- Encourage the person to decide for themselves if they want to change their pattern of alcohol use, particularly after there has been a balanced discussion of the pros and cons of the current pattern of use.
- If the person is still not ready to stop or reduce alcohol use, then ask the person to come back to discuss further.

What is a standard drink?

- A standard drink is a measure of the amount of pure alcohol consumed, usually between 8 g and 12 g. If the amount of alcohol contained in a standard drink in that country is outside these limits, the number of standard drinks may need to be adjusted.

Signs of acute intoxication of alcohol

- Smell of alcohol on the breath
- Slurred speech
- Uninhibited behavior
- Impaired level of consciousness such as seizures

Brief interventions for harmful alcohol use at primary health care level
Does the person have alcohol dependence?

- A strong desire or sense of compulsion to take alcohol
- Difficulties in controlling alcohol use in terms of its onset, termination or levels of use
- A physiological withdrawal state when alcohol use has ceased or been reduced, as shown by the characteristic withdrawal syndrome for alcohol; or use of the same (or a closely related) substance with the intention of relieving or avoiding withdrawal symptoms
- Evidence of tolerance, such that increased doses of alcohol are required in order to achieve effects originally produced by lower doses
- Progressive neglect of alternative pleasures or interests because of alcohol use, increased amount of time necessary to obtain or take alcohol or to recover from its effects
- Alcohol use persisting despite clear evidence of overtly harmful consequences, such as harm to the liver, depressive mood states, or impairment of cognitive functioning

Does the person have features of alcohol withdrawal?

- Alcohol withdrawal occurs following cessation of heavy alcohol consumption, typically between 6 hours and 6 days after the last drink.
- **Look for:**
  - Tremor in hands
  - Sweating
  - Vomiting
  - Increased pulse and blood pressure
  - Agitation
- **Ask about:**
  - Headache
  - Nausea
  - Anxiety

*Seizures and confusion may occur in severe cases.*

Alcohol abuse and alcohol dependence

- Alcohol abuse means having unhealthy or dangerous drinking habits, such as drinking every day or drinking too much at a time
- Continued abuse alcohol can lead to alcohol dependence. Alcohol dependence or alcoholism is state of physical and mental addiction to alcohol
- Alcoholism is a long-term (chronic) disease. It's not a weakness or a lack of willpower.
**ICD-10 criteria for the alcohol dependence syndrome**

- Three or more of the following manifestations should have occurred together for at least 1 month or, if persisting for periods of less than 1 month, should have occurred together repeatedly within a 12-month period:
  - a strong desire or sense of compulsion to consume alcohol
  - impaired capacity to control drinking in terms of its onset, termination, or levels of use, as evidenced by: alcohol being often taken in larger amounts or
  - over a longer period than intended; or by a persistent desire to or unsuccessful
  - efforts to reduce or control alcohol use

**ICD-10 criteria for the alcohol dependence syndrome**

- a physiological withdrawal state when alcohol use is reduced or ceased, as evidenced by the characteristic withdrawal syndrome for alcohol, or by use of the same (or closely related) substance with the intention of relieving or avoiding withdrawal symptoms
- evidence of tolerance to the effects of alcohol, such that there is a need for significantly increased amounts of alcohol to achieve intoxication or the desired effect, or a markedly diminished effect with continued use of the same amount of alcohol

**ICD-10 criteria for the alcohol dependence syndrome**

- preoccupation with alcohol, as manifested by important alternative pleasures or interests being given up or reduced because of drinking; or a great deal of time being spent in activities necessary to obtain, take, or recover from the effects of alcohol
- persistent alcohol use despite clear evidence of harmful consequences, as evidenced by continued use when the individual is actually aware, or may be expected to be aware, of the nature and extent of harm.
Is withdrawal likely to be severe? Look for:

» Past episodes of severe alcohol withdrawal including delirium and seizures
» Other medical or psychiatric problems or benzodiazepine dependence
» Severe withdrawal symptoms already present only a few hours after stopping drinking

Screening for alcohol use disorder

• Several tools exist
• AUDIT tool: validated in many countries.
• CAGE (Cut down, Angry, Guilty, Eye-opener) is one of the tools

People who should not drink at all

• Children and adolescents (under legal age)
• People who cannot keep drinking to a moderate level
• Pregnant or breast feeding women
• People taking medications that can interact with alcohol
• People who are and will be driving.
Women – Pregnancy and breastfeeding

- Advise women who are pregnant or considering becoming pregnant to avoid alcohol completely.
- Advise women that consuming even small amounts of alcohol early in pregnancy can harm the developing foetus, and that larger amounts of alcohol can result in a syndrome of severe developmental problems called Foetal Alcohol Syndrome (FAS).
- Advise women who are breastfeeding to avoid alcohol completely.
- Given the benefits of exclusive breastfeeding (particularly in the first 6 months), if mothers continue to drink alcohol they should be advised to limit their alcohol consumption, and to minimize the alcohol content of the breast milk, such as by breastfeeding before drinking alcohol and not again until after blood levels fall to zero (allowing approximately 2 hours for each drink consumed, i.e. 4 hours if TWO drinks are consumed), or using expressed breast milk.
- Mothers with harmful substance use and young children should be offered what social support services are available, including additional post natal visits, parenting training, and child care during medical visits.

Additional source of reference for alcohol

- mhGAP intervention guide for mental, neurological and substance use disorders in non-specialized health settings: Mental Health Gap Action Programme (mhGAP).
- Alcohol Use and Alcohol Use Disorders
  [http://apps.who.int/iris/bitstream/handle/10665/44406/9789241548069_eng.pdf?sequence=1](http://apps.who.int/iris/bitstream/handle/10665/44406/9789241548069_eng.pdf?sequence=1)