

VOLUME A

Basics of Addiction, Screening, Assessment, Treatment Planning and Care Coordination



Treatnet

VOLUME A

INTRODUCTORY MODULE Basics of Addiction

MODULE 1 Screening and Brief Intervention Using ASSIST

Rationale for
screening and
brief intervention

ASSIST
screening
basics

ASSIST brief
intervention
basics

Planning and
implementation
of ASSIST

MODULE 2 Addiction Severity Index

Interviewing
instructions and
coding

Employment
section. Drug
and alcohol

Legal and family
sections

Psychiatric
section, review
and
competency
measures

MODULE 3 Treatment Planning M.A.T.R.S.

Assessment
tools in treatment
planning

Prioritising
problems

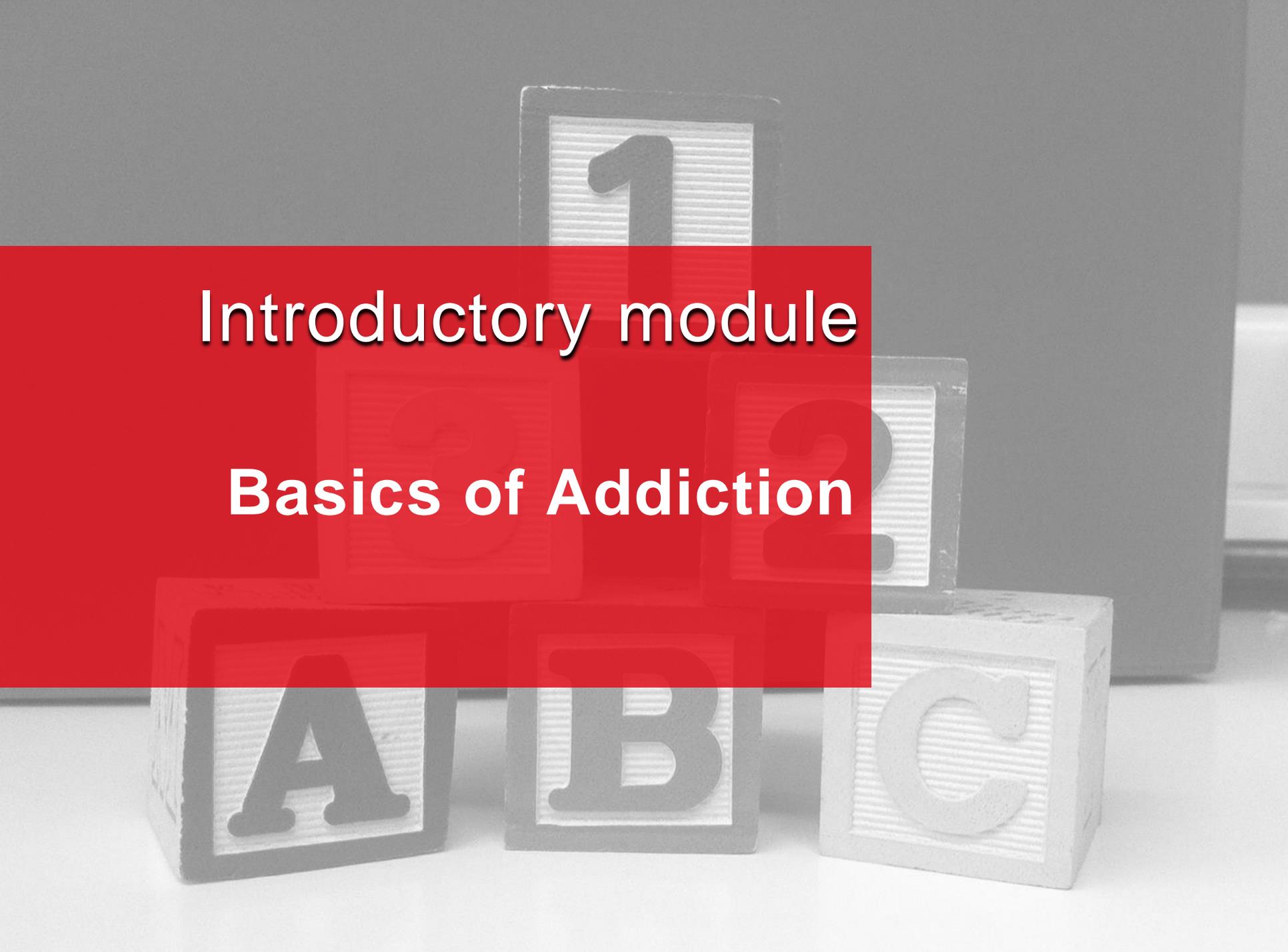
Putting
treatment
planning
M.A.T.R.S. into
practice

Pre-assessment



Icebreaker





Introductory module

Basics of Addiction

Training objectives

At the end of this workshop you will be able to:

- ▶ Understand the reasons people start drug use
- ▶ Identify 3 main defining properties of drug addiction
- ▶ Identify 3 important concepts in drug addiction
- ▶ Understand characteristics and effects of major classes of psychoactive substances
- ▶ Understand why many people dependent on drugs frequently require treatment



An aerial, high-angle photograph of a crowded dance floor. The scene is dimly lit with warm, golden-brown tones. Numerous people are seen from above, engaged in various activities: some are dancing, some are talking, and some are looking at their phones. The floor is dark, and the overall atmosphere is that of a busy, social event.

Introduction to psychoactive drugs

What are psychoactive drugs?

“...Any chemical substance which, when taken into the body, alters its function physically and/or psychologically....”

World Health Organization, 1989

“...Any substance people consider to be a drug, with the understanding that this will change from culture to culture and from time to time.”

Krivanek, 1982

How do psychoactive drugs affect people?

Psychoactive drugs interact with the central nervous system (CNS) affecting:

- ▶ Mental processes and behaviour
- ▶ Perceptions of reality
- ▶ Level of alertness, response time and perception of the world

Why do people initiate drug use?

There is a believe that drug use is motivated (at least initially) by the pursuit of pleasure. However, according to scientific evidence, there are factors such as exposure to abuse, neglect, violence, etc., especially in childhood, leading to vulnerabilities to initiate drug use.



Why do people initiate drug use?

Drug use INITIATION starts through:

- Experimental use
- Peer pressure
- Personality disorder
- Comorbid psychiatric disorder
- Exposure to abuse and violence in early childhood
- Vulnerability conditions due to abuse, violence and neglect in early childhood

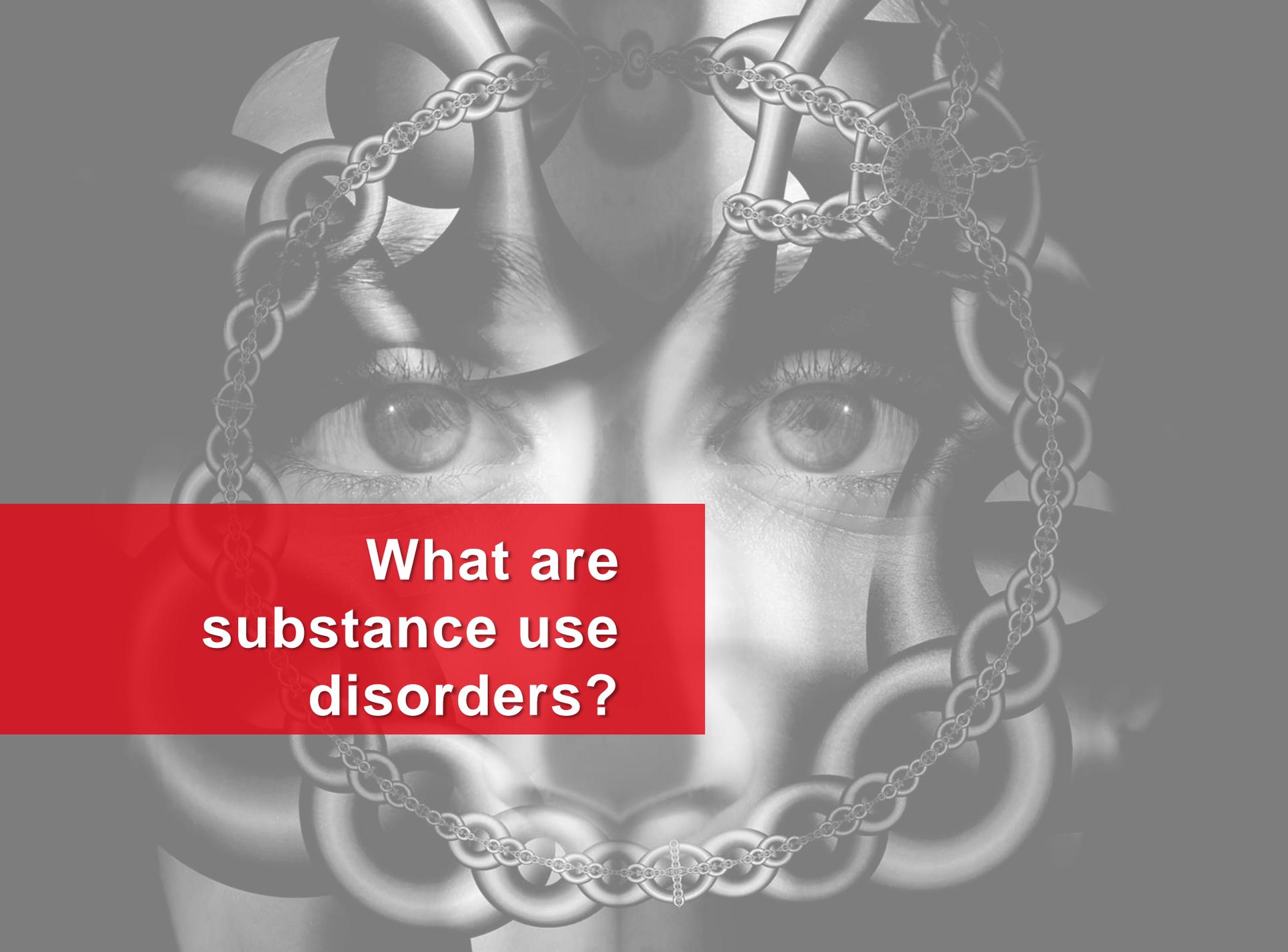
Key MOTIVATORS & conditioning factors:

- Stress/pain amelioration
- Functional (purposeful)
- Fun (pleasure)
- Psychiatric disorders
- Social/educational disadvantages

Why do people continue drug use?

After repeated drug use, “deciding” to use drugs is no longer voluntary because

DRUGS AFFECT THE BRAIN!



**What are
substance use
disorders?**

What is drug addiction?

Drug addiction is a complex illness characterised by compulsive and at times, uncontrollable drug craving, seeking, and use that persist even in the face of extremely negative consequences.

(NIDA, 1999)

Substance dependence is not a failure of will or of strength of character but a medical disorder that could affect any human being. Dependence is a chronic and relapsing disorder, often co-occurring with other physical and mental conditions."

(WHO, 2004)

Characteristics of drug addiction



- ▶ Compulsive behaviour
- ▶ Behaviour is reinforcing (rewarding or pleasurable)
- ▶ Loss of control in limiting intake

Important terminology



- ▶ Psychological craving
- ▶ Tolerance
- ▶ Withdrawal symptoms

Psychological craving

Psychological craving is a strong desire or urge to use drugs. Cravings are most apparent during drug withdrawal.



Tolerance

Tolerance is a state in which a person no longer gets the expected responses from a drug as it was experienced before. A higher dose is now required to achieve the same effect.



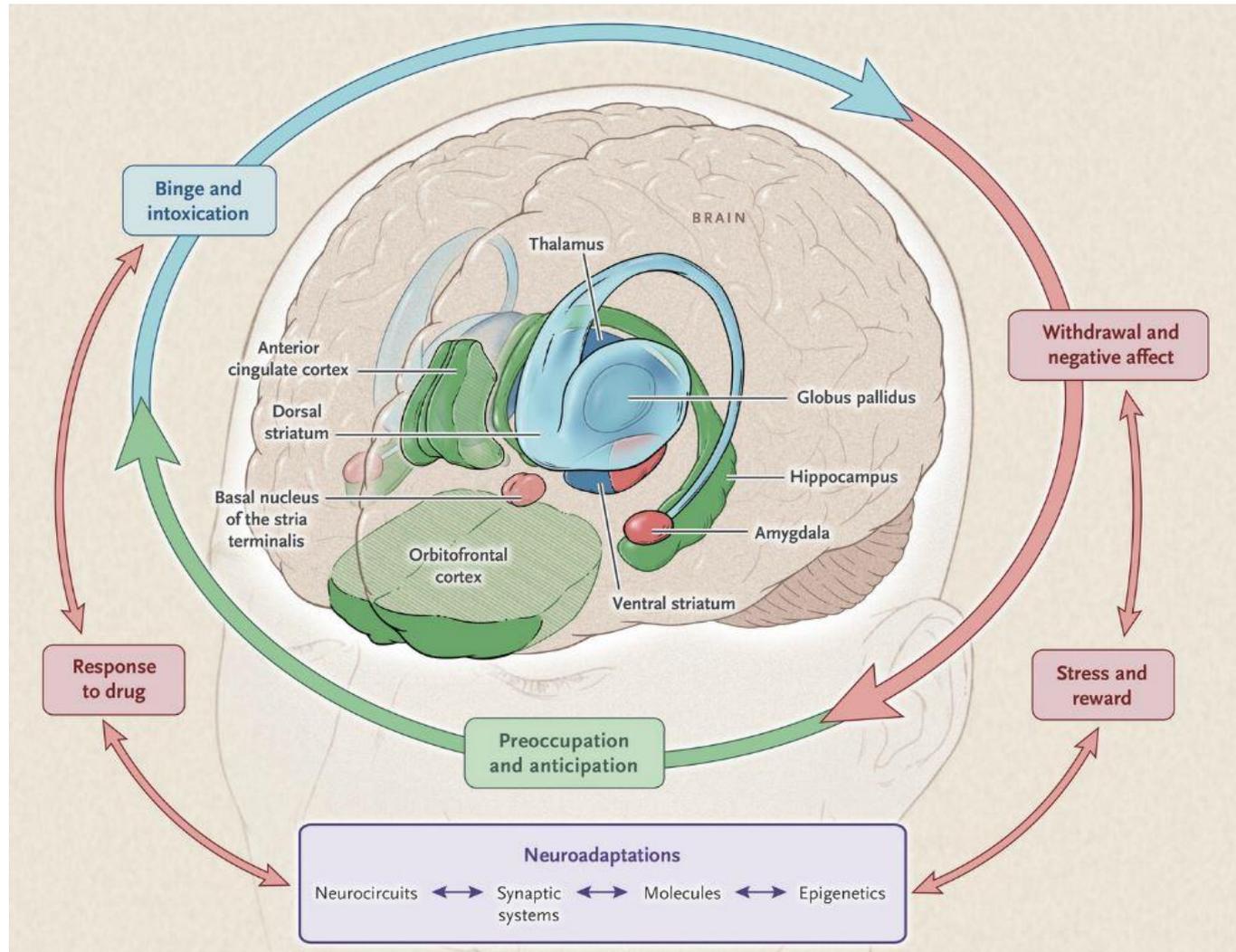
Withdrawal



The following symptoms may occur when drug use is reduced or discontinued:

- ▶ Tremors, chills
- ▶ Cramps
- ▶ Emotional problems
- ▶ Cognitive and attention deficits
- ▶ Hallucinations
- ▶ Convulsions
- ▶ Death

How addictive drugs work



The neurobiology of dependence

- ▶ Involves the release of the neurotransmitter, dopamine, in the nucleus accumbens region of the brain
- ▶ Produces pleasurable feelings, positive attitudes, and focused attention
- ▶ With repeated exposure, compulsive drug-seeking and craving are elicited

Psychoactive substances

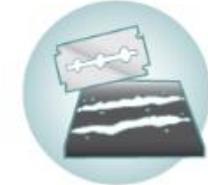
Legal substances

- ▶ Alcohol
- ▶ Tobacco products



Illicit substances

- ▶ Opioids
- ▶ Cannabis
- ▶ Cocaine
- ▶ Hypnotics
- ▶ Sedatives
- ▶ Hallucinogens
- ▶ Psychoactive inhalants
- ▶ Amphetamines and other stimulants



Let's think!



Categories of drugs

How many drugs do you know? Do you know to which of the following categories they belong?

- ▶ Tobacco
- ▶ Alcohol
- ▶ Cannabis
- ▶ Cocaine
- ▶ ATS
- ▶ Inhalants
- ▶ Sedatives
- ▶ Hallucinogens
- ▶ Opioids
- ▶ Other

Categories of drugs

Tobacco	Cigarettes, chewing tobacco, cigars, etc.
Alcohol	Beer, wine, spirits, etc.
Cannabis	Marijuana, pot, grass, hash, etc.
Cocaine	Coke, crack, etc.
ATS	Speed, meth, ecstasy, etc.
Inhalants	Nitrous, glue, petrol, paint thinner, etc.
Sedatives	Diazepam, alprazolam, flunitrazepam, midazolam, etc.
Hallucinogens	LSD, acid, mushrooms, trips, ketamine, etc.
Opioids	Heroin, morphine, opium, methadone, codeine, etc.
Other	Kava, datura, khat, nutmeg and caffeine

New psychoactive substances



What are New Psychoactive Substances (NPS)?

“Substances of abuse, either in a pure form or a preparation, that are not controlled by the 1961 Single Convention on Narcotic Drugs or the 1971 Convention on Psychotropic Substances, but which may pose a public health threat.”

(UNODC)

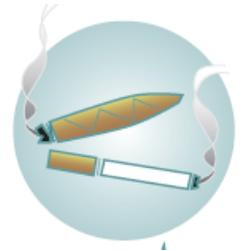
Tobacco: effects and risks

The risks associated with use of tobacco products include:

Premature ageing and wrinkling of the skin
Low fitness and longer recovery times after having a cold or flu
Respiratory infections and asthma
High blood pressure and diabetes mellitus
Miscarriage, premature labour and low birth weight babies for pregnant women
Kidney disease
Chronic obstructive pulmonary diseases including emphysema
Heart disease, stroke and vascular diseases
Cancers of lung, bladder, breast, mouth, throat and oesophagus

Substances

- ▶ Cigarettes
- ▶ Chewing tobacco
- ▶ Cigars



Pharmacological effects

- ▶ Stimulant and sedative. Increase in blood pressure, slight hyperglycemia.

Alcohol

- ▶ If you drink alcohol, you are at risk of a range of health and other problems, especially if:
 - you drink more than 2 standard drinks* a day;
 - you do not have at least 2 days of the week when you do not drink.
- ▶ There is no risk-free level of alcohol consumption, and
- ▶ For many people consumption of 2 standard drinks a day can still be associated with significant risks

A *standard drink is:

- 1 can of ordinary beer (330ml at 4%);
- a single shot of spirits (30 ml at 40%);
- a glass of wine or small glass of sherry (100 ml at 12% or 70ml at 18%);
- a small glass of liqueur or aperitif (50ml at 25%).

Alcohol: effects and risks

The risks associated with use of alcohol at unsafe levels include:

Hangovers, aggressive and violent behaviour, accidents and injury, nausea and vomiting

Reduced sexual performance and premature ageing

Digestive problems, ulcers, inflammation of the pancreas and high blood pressure

Anxiety and depression, relationship difficulties, and financial and work problems

Difficulty remembering things and solving problems

Birth defects and brain damage in babies of pregnant women

Permanent brain damage leading to memory loss, cognitive deficits and disorientation

Stroke, muscle and nerve damage

Liver and pancreas diseases

Cancers of the mouth, throat and breast

Suicide

Substances

- ▶ Beer
- ▶ Wine
- ▶ Spirits, etc.

Pharmacological effects

- ▶ Acts as a sedative-hypnotic depressant
- ▶ Slows down the nervous system
 - Causes drowsiness
 - Relieves pain
 - Blood Alcohol Concentration determines how much depression of the CNS will occur

Cannabis: effects and risks

The risks associated with use of cannabis include:	
	Problems with attention and motivation
	Anxiety, paranoia, panic and depression
	Decreased memory and problem solving ability
	High blood pressure
	Asthma and bronchitis
	Psychotic symptoms and psychoses particularly in those with a personal or family history of schizophrenia
	Heart disease and chronic obstructive pulmonary disease
	Cancers of the upper airway and throat

Substances

- ▶ Hashish
- ▶ THC
- ▶ Marijuana
- ▶ Bhang
- ▶ Ganja



Pharmacological effects

- ▶ Feelings of euphoria, lightness of limbs, increased appetite, tachycardia. Impaired judgment

Opioids: effects and risks

The risks associated with use of opioids include:

Itching, nausea and vomiting

Drowsiness, constipation, tooth decay and irregular menstrual periods

Difficulty concentrating and remembering things

Depression, reduced libido and impotence

Financial difficulties and criminal offences

Relationship stress

Problems maintaining work and family life

Tolerance, dependence and withdrawal symptoms

Overdose and death from respiratory failure

Substances

- ▶ Heroin
- ▶ Morphine
- ▶ Codeine
- ▶ Methadone
- ▶ Pethidine



Pharmacological effects

- ▶ Relieve pain, produce euphoria
- ▶ Induce respiratory depression, drowsiness, and impaired judgment

Cocaine: effects and risks

The risks associated with use of cocaine include:

Difficulty sleeping, heart racing, headaches and weight loss

Numbness, tingling, clammy skin and skin scratching or picking

Intense craving and stress from the lifestyle

Accidents and injury and financial problems

Mood swings – anxiety, depression and mania

Paranoia, irrational thoughts and difficulty remembering things

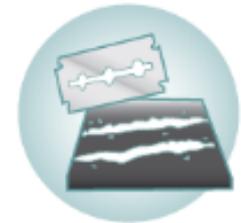
Aggressive and violent behaviour

Psychosis after repeated use of high doses

Sudden death from cardiovascular acute conditions

Substances

- ▶ Cocaine
- ▶ Crack
- ▶ Rock



Pharmacological effects

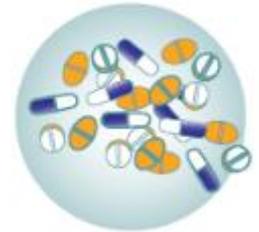
- ▶ Feelings of elation, exaggerated feelings of confidence
- ▶ Acute toxic reactions
 - hypertension
 - cardiac arrhythmias
 - auditory and visual hallucinations
 - seizures

Amphetamines: effects and risks

The risks associated with use of amphetamine-type stimulants include:	
	Difficulty sleeping, loss of appetite and weight loss, dehydration and reduced resistance to infection
	Jaw clenching, headaches and muscle pain
	Mood swings –anxiety, depression, agitation, mania and panic
	Tremors, irregular heartbeat and shortness of breath
	Difficulty concentrating and remembering things
	Paranoia, aggressive and violent behaviour
	Psychosis after repeated use of high doses
	Permanent damage to brain cells
	Liver damage, brain haemorrhage and sudden death from cardiovascular acute conditions

Substances

- ▶ Dexamphetamine
- ▶ Methamphetamine
- ▶ Methylphenidate
- ▶ Phenmetrazine
- ▶ Diethylpropion



Pharmacological effects

- ▶ Euphoria, anorexia, nausea, vomiting, insomnia, abnormal behavior such as aggression, grandiosity, hyper-vigilance, agitation and impaired judgment

Hypnotic / sedatives: effects and risks

The risks associated with use of sedatives and sleeping pills include:

Drowsiness, dizziness and confusion

Difficulty concentrating and remembering things

Nausea, headaches and unsteady gait

Sleeping problems

Anxiety and depression

Tolerance and dependence after a short period of use

Severe withdrawal symptoms

Overdose and death if used with alcohol, opioids or other depressant drugs

Substances

- ▶ Benzodiazepines
- ▶ Barbiturates
- ▶ Buspirone
- ▶ Methaqualone

Pharmacological effects

- ▶ Muscle relaxation, calmness, sleep
- ▶ Impaired concentration, memory, coordination
- ▶ Slurred speech, drowsiness, unsteady gate

Hallucinogens: effects and risks

The risks associated with use of hallucinogens include:

Visual, auditory, tactile and olfactory changes and unpredictable behaviour

Difficulty sleeping

Nausea and vomiting

Increased heart rate and blood pressure

Mood swings

Anxiety, panic and paranoia

Flash-backs

Worsen the symptoms of mental illnesses such as schizophrenia

Substances

- ▶ Lysergide (LSD)
- ▶ Dimethyltryptamine (DMT)
- ▶ Psilocybin
- ▶ Mescaline
- ▶ MDMA
- ▶ Phencyclidine

Pharmacological effects

- ▶ Feelings of euphoria/dysphoria, mixed mood changes, altered perceptions, visual illusions
- ▶ Adverse effects include panic reactions, flashbacks, mood disorders

Inhalants: effects and risks

The risks associated with use of inhalants include:

Flu like symptoms, sinusitis and nosebleeds

Nausea and vomiting, indigestion, stomach ulcers and diarrhoea

Dizziness and hallucinations, nausea, drowsiness, disorientation and blurred vision

Headaches, accidents and injury, unpredictable and dangerous behaviour

Coordination difficulties, slowed reactions and poor oxygen supply to the body

Memory loss, confusion, depression, aggression and extreme tiredness

Delirium, seizures, coma and organ damage (heart, lungs, liver, kidneys)

Death from heart failure

Substances

- ▶ Industrial solvents, glue, aerosol, paints, lacquer thinners, gasoline, cleaning fluids, amyl nitrite

Pharmacological effects

- ▶ Belligerence, hallucinations, lethargy, psychomotor impairment, euphoria, impaired judgement, dizziness, nystagmus, slurred speech, tremors, muscle weakness, unsteady gate, stupor, coma

Substance use problems

- ▶ Acute intoxication
- ▶ Regular use
- ▶ Dependent use
- ▶ Injecting



Acute intoxication

- ▶ Acute toxic effects including ataxia, vomiting, fever and confusion
- ▶ Overdose and loss of consciousness
- ▶ Aggression and violence
- ▶ Accidents and injury
- ▶ Unintended sex and unsafe sexual practices
- ▶ Unpredictable behaviour

Regular use

- ▶ (Substance) specific physical and mental health problems
- ▶ Tolerance
- ▶ Depression, anxiety, mood swings, irritability
- ▶ Sleep problems
- ▶ Relationship problems
- ▶ Some difficulties with regular activities (job or study)
- ▶ Cognitive problems relating to memory or attention
- ▶ Financial problems
- ▶ Legal problems

Dependent use

- ▶ Marked tolerance & withdrawal symptoms on abstinence
- ▶ Severe physical & mental health problems
- ▶ Increasingly dysfunctional in daily life
- ▶ Craving & increased desire to use
- ▶ Criminal behaviour
- ▶ Usual role obligations not fulfilled
- ▶ Relationship breakdowns
- ▶ Difficult to stop in spite of problems
- ▶ Continued use despite evidence the use is causing harms to the individual

Injecting

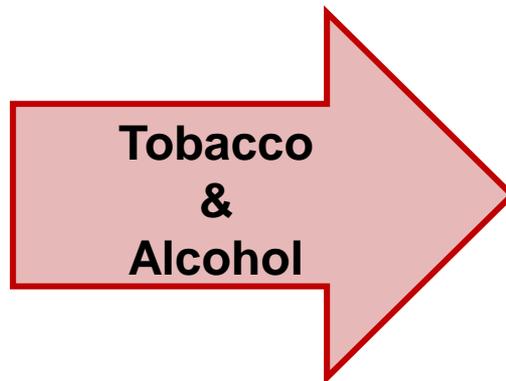
Increased likelihood of:

- ▶ Dependence
- ▶ Overdose
- ▶ Psychosis
- ▶ Vein collapse
- ▶ Infection
- ▶ Local abscesses and ulcers
- ▶ Systemic HIV and hepatitis C
- ▶ Stigma



Matters of substance

- ▶ Very wide range of:
 - Pharmacological properties
 - Medical problems
 - Social problems



At least as dangerous
as many illicit
substances!

- ▶ Chemical substance in its pure form is just ONE determinant of harm

Matters of substance

- ▶ Drug use is accompanied by a variety of psychiatric problems, including:
 - antecedent pre-disposing factors (e.g., personality disorders)
 - those induced by drug use and drug dependence
- ▶ Co-occurring psychiatric disorders cause:
 - more extensive treatment
 - worse clinical course than other cases
- ▶ Intervention programmes should reflect:
 - social and pharmacological complexities of psychoactive substances
 - relative differences among social and pharmacological complexities

Prerequisites for a public health approach to harmful substance use



- ▶ Is the problem prevalent?
- ▶ Is there an adequate definition of the problem and operational criteria for diagnosis?
- ▶ Are screening tests available, brief, simple to administer and valid in different cultural settings?
- ▶ Are early intervention and treatment methods available?

Is the problem prevalent?

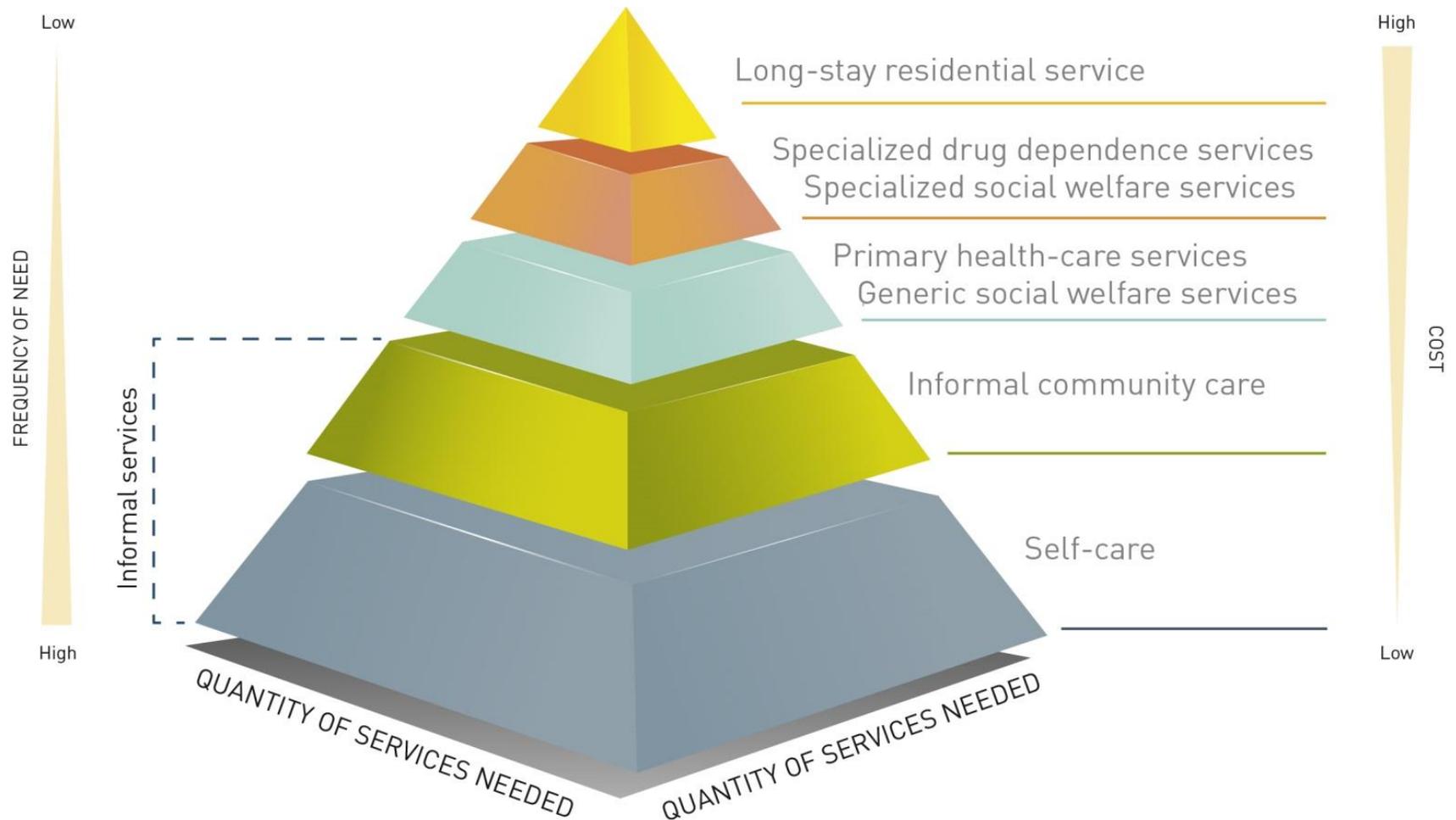
Developing Countries		Developed Countries	
High mortality	Low mortality	Low mortality	
1 Underweight	Alcohol	Tobacco	
2 Unsafe sex	Blood pressure	Blood pressure	
3 Unsafe water/sanitation	Tobacco	Alcohol	
4 Indoor smoke, solid fuels	Underweight	Cholesterol	
5 Zinc deficiency	Overweight	Overweight	
6 Iron deficiency	Cholesterol	Low fruit/veg. intake	
7 Vitamin A deficiency	Low fruit/veg. intake	Physical inactivity	
8 Blood pressure	Indoor smoke, solid fuels	Illicit drugs	
9 Tobacco	Iron deficiency	Unsafe sex	
10 Cholesterol	Unsafe water/sanitation	Iron deficiency	
11 Alcohol	Unsafe sex	Lead exposure	

Definition of the problem: conceptual issues

- ▶ Early intervention vs. traditional treatment
- ▶ At-risk use vs. dependence
- ▶ Public health vs. individual perspective
- ▶ Risk factors vs. disease conditions



Pyramid of services



The spectrum of drug use

Lifetime abstinence

Current Abstinence

Low risk use

Hazardous use

Harmful use

Dependence

Definition of the problem: Diagnostic issues and WHO terminology

- ▶ **Hazardous use:** elevated risk without the presence of physical or mental harm
- ▶ **Harmful use:** substance use that causes physical or psychological harm
- ▶ **Substance dependence:** an interrelated cluster of physical symptoms, including physical withdrawal, impaired control over continued use, a strong desire to use the substance and continued use despite problems

Hazardous use

- ▶ A pattern of substance use that increases the risk of harmful consequences
 - In contrast to harmful use, it refers to patterns of use that are of public health significance despite the absence of any current disorder
- ▶ Often defined by the amount one uses, also known as the dosage

ICD-10 harmful use

- ▶ A pattern of psychoactive substance use that is causing damage to health (physical or mental)
- ▶ Commonly, but not invariably, has adverse social consequences
- ▶ Social consequences in themselves are not sufficient to justify a diagnosis of harmful use



ICD-10 criteria for dependence

An individual is considered dependent if he or she meets 3 or more of the following six criteria:

- ▶ A strong desire or compulsion
- ▶ Difficulties in controlling use
- ▶ Continuing to use despite harmful consequences
- ▶ Neglect of alternative pleasures and interests
- ▶ Increased tolerance
- ▶ Withdrawal

Why intervene in health care or other human service settings?

5 main reasons

- ▶ Opportunity to find large numbers of patients at risk of developing substance use disorders
- ▶ It is medically appropriate to address both the symptoms and the cause of the problem
- ▶ Health care professionals are respected and trusted
- ▶ Studies prove that interventions are effective
- ▶ In health care settings, stigma can be minimized

Questions



Wrap-up



- ▶ Why do people start drug use?
- ▶ What are the 3 main defining properties of drug addiction?
- ▶ What are the major classes of psychoactive substances?
- ▶ Can you give an example of some of their characteristics and effects?
- ▶ Why do many drug dependent people frequently require treatment?



Post-assessment

Thank you for your time!

End of workshop

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