

Overview of Illicit Drugs

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Overview



- How to ask about substance misuse – key questions
- What drugs are people using
- What is harmful use and dependence
- What treatments are available
- What treatments are available

What are they using?

Which substances:

- Alcohol
- Tobacco
- Cannabis
- Ecstasy
- Amphetamines
- Heroin
- Cocaine 😊
- ☹️Bio / psycho / social / forensic

Street names: booze, fags, weed, Es, speed, smack, Charlie

Amphetamines



Amphetamines - stimulants

Speed, uppers, dexies, £8-12/wrap

Swallow, snort, dab on gums, inject

Feel powerful, alert, energised

Sweat, tremor, headaches, sleepiness, blurred vision

Increase in HR, RR, BP

Crash- irritable/depressed for 1-2 days

Prolonged use – hallucinations and intense paranoia

Psychologically addictive – aggression, anxiety, intense cravings

Benzodiazepines

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Benzodiazepines - depressant

£1 for 4x5mg tabs

Effects

- relief of anxiety
- sedation
- relaxation
- impaired memory
- muscle relaxation
- anticonvulsant
- confusion
- stupor

Cannabis



Cannabis

Pot, marijuana, weed, grass, ganja, reefer, spliff, hashish, skunk...

- smoked in rolled paper – ‘joint’
- hollowed out cigar – ‘blunt’
- pipes – ‘bowls’
- water pipes – ‘bongs’
- mix in food or brewed as an infusion

Cannabis

Effects:

- euphoria
- anxiety/panic
- altered perceptions
- impaired coordination and memory
- red eyes
- sleepy
- hungry
- paranoia
- hallucination

Crack

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Cocaine



Cocaine/Crack - stimulant



Cocaine hydrochloride

"coke, snow, nose candy, white"

1g=£40 – 10-20 lines

Crack [cocaine but no H⁺Cl⁻] - freebase, rocks

Cocaine: snort, inject, rub on gums, Crack: smoked, inject .

Cocaine/crack

Feel confident, physically and mentally strong.

Dry mouth, sweating, ↓ appetite, increased HR, restlessness, anxiety, paranoia, hallucinations and rarely death from respiratory or heart failure.

After effects - fatigue, depression, difficulty sleeping, diarrhea, vomiting, the “shakes”, insomnia, anorexia, weight loss and sweating.

Acute - ischaemia, infarction.

Long-term - include inflamed nasal mucosa, perforated septum, respiratory problems and partial aphonia

GHB – Gamma-hydroxybutyrate

GBL – Gamma-butyrolactone



GHB/GBL



Euphoria, increased confidence and libido

Anesthetic- sedative

Easy to overdose – small window between recreational dose and overdose

Vomiting, convulsions, muscle spasm, coma and respiratory depression

Physical dependence - withdrawals include insomnia, anxiety, tremor and psychosis

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Mephedrone



MEPHEDRONE

Slang names: Mieow, Meow, Meph, Mephedrone, MCAT, 4MMC



Mephedrone

4-methyl methcathinone



MMCAT/Miaow/meow/4MMC

Snort or swallow

Synthetic stimulant drug recently made illegal

Causes euphoria, alertness, talkativeness and feelings of empathy

Increases heart rate/BP/vasoconstriction

Some reports of paranoia, convulsions + death

Low mood after use

Crystal Meth

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Methamphetamine

Tina, crystal, ice, glass

Swallowed, snorted, injected or smoked

Effects: euphoria, sexual arousal, increased energy, decreased appetite, nausea, meth mouth, perceptual disturbances e.g. insects crawling under skin, sleeplessness, panic attacks, compulsive repetitive movements, paranoia, hallucinations.

Prolonged use

- violent, aggressive behaviour
- psychosis resembling paranoid schizophrenia
- brain damage

Ecstasy

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Ecstasy - MDMA



XTC, X, E - £1-5 per pill.
Swallow or snort.

Mild hallucinogenic/stimulant effect intensifying emotions

Tingly skin, dry mouth, cramps, pupils dilated, blurred vision, chills, sweats, nausea, jaw clenching

Depression, paranoia, anxiety, confusion

Increase BP, HR, Temp

>200 deaths in last 15yrs – heatstroke/ dilutional hyponatraemia /heart failure

After use - tired and low for 3-4 days.

Heroin



Heroin - depressant

Smack, gear, junk, brown

£50 for 1g

Injected, smoked, inhaled

Euphoria, relaxation, detachment, reduced anxiety – followed by drowsiness, nausea, stomach cramps, vomiting

Overdose

coma and respiratory failure

Long-term

constipation, amenorrhoea, decreased resistance to infections

Inhalants

Types of Inhalants



Liquids

Paint thinner
Paint Remover
Dry-Cleaning
Fluids
Degreasers
Gasoline
Glues
Correction
Fluids,
Felt-Tip Markers



Aerosols

Spray Paints
Deodorant
Hair Sprays
Vegetable Oil
Sprays
Fabric Protector
Spray



Gases

Chloroform
Nitrous Oxide
Whipped Cream
Cans
Butane Lighters
Propane Tanks
Refrigerants



Nitrites

Leather Cleaner
Room Deodorizer
Food
Preservatives



Inhalants

Glue, paint thinner, dry cleaning fluids, petrol, hair spray, aerosol deodorants, spray paint

- sniffed- breathe directly from container
- bagging- from plastic bag
- huffing holding inhalant-soaked rag in mouth

Immediate

high, giddy and confused

Long-term

headaches, nosebleeds, lose hearing and smell, neurological damage, liver damage

Abused substance most likely to cause severe toxic reaction and death

Ketamine

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Ketamine

K, special K

Inject or snort

Quick acting anaesthetic

Intoxication and hallucinations like LSD

Lose sense of time/reality <2 hours – trip or K-hole

Also nausea, vomiting, delirium, memory disturbance, movement difficulties, body numbness and decreased RR – can cause coma, cardiovascular or respiratory arrest

HOW MUCH are they using?



Alcohol

strong lager, can size, self measures – calculate units

Heroin sold in bags, e.g. £10 bag, £20 bag. 1g approx £40

Crack sold in rocks, likewise £10, £20 etc. 1g £40.

Street methadone - £10 for 100mls

Valium – “blues” – 5-10mg tablets

ROUTE: How are they using it?



Heroin – smoked (“chasing”), injecting (“shooting up”), snorting. If injecting, where?

Crack – smoked (“on the pipe”), injected (often with heroin known as “snowballing”)

Cocaine – snorted through a straw or bank note – “tooting”.

Smoking heroin



Injecting

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Smoking crack



HOW OFTEN are they using it?



Daily use:

Heroin and alcohol dependent users tend to use daily, if they don't, they get sick.

Binge pattern:

crack/cocaine – binge pattern common, e.g. 3 days of use, 2 days without using, etc. Alcoholic binges or benders

Sporadic or intermittent use:

Designer drugs – commonly used at weekends.

What happens if you don't use?



Alcohol, heroin and benzos have clearly defined physiological withdrawal states.

Cocaine/crack withdrawal is more psychological:

- irritability,
- craving,
- restlessness.

Withdrawal Symptoms

Alcohol:

sweats, tremors, tachycardia, nausea, retching, anxiety, raised blood pressure – may lead to withdrawal fits (within a few hours) and even DTs (disorientation, visual hallucinations and withdrawal symptoms).

Opiates:

sweats (cold and clammy), goose-bumps, nausea, retching, abdominal pain, diarrhoea, muscle cramps and spasms, yawning, pupil dilatation, lacrimation, rhinorrhoea, tachycardia.

Diagnosis



Here and now:

- Acute Intoxication
- Withdrawal

Chronic

- Harmful Use
- Dependence

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Harmful Use



ICD 10:

A pattern of psychoactive substance use that is causing damage to health. The damage may be physical (as in cases of alcoholic hepatitis) or mental (e.g. low mood following a crack binge).

Dependence

ICD10: A cluster of behavioural, cognitive, and physiological phenomena that develop after repeated substance use and that typically include:

1. a strong desire to take the drug.
2. difficulties in controlling its use.
3. persisting in its use despite harmful consequences.
4. a higher priority given to drug use than to other activities and obligations.
5. increased tolerance.
6. and.....sometimes a physical withdrawal state.

Treatment of Drug Misuse & Dependence



NICE guidance and technology appraisals for:

Methadone and Buprenorphine maintenance for opiate dependence

Detoxification for opiates and alcohol

Naltrexone and Acamprosate for relapse prevention

Brief interventions for hazardous and harmful alcohol misuse

Psychosocial interventions for drug and alcohol misuse and dependence

Needle exchange

Family interventions

Interventions for common psychiatric co-morbidities

Interventions for common physical co-morbidities, e.g. Hep B vaccination, Hep C treatment, HIV treatment

Drug misuse getting help



- Self-referrals often accepted or by GP, social services, criminal justice system and hospital services
- Phone local service for advice on how to make a referral and what services they offer
- websites or national sites, such as:
www.talktofrank.com

Presentations of drug misuse to A&E, AMU and GP

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Substance misuse problems

Related to:

acute effects of the substance, e.g. alcohol intoxication

long-term effects of the substance, e.g. liver cirrhosis in chronic harmful alcohol use

effects related to the route of administration of the substance, e.g. HIV, hepatitis B and C from sharing drug paraphernalia

effects due to substance dependence, e.g. withdrawal symptoms, drug-seeking behaviour

Acute drug effects - opiates

Heroin - overdose

- Opiate drug, smoked, snorted or injected, mu-receptor agonist, sedative and analgesic effects, causes physical dependence
- Overdose – pinned pupils, shallow respiration, cyanosis, low O₂ saturation, loud snoring, unrousable, respiratory depression and death
- May be poly-drug overdose, especially benzodiazepines and alcohol.



Acute drug effects - opiates

Overdose Treatment:

Naloxone – opiate antagonist

Will reverse opiate effects (some patients may have it at home, ambulances carry it)

But has short half-life, so patient may try to leave after being given naloxone, but risk of becoming unconscious again when naloxone wears off.

Flumazenil will reverse benzodiazepine effects



Acute drug effects – GBL/GHB

Gamma-butyrolactone and gamma-hydroxybutyric acid:

Liquid, weak action at GABA-B receptors – sedative effects

May cause intoxication and respiratory depression, especially with alcohol

Repeated use - physical dependence

GBL intoxication rapidly progress to withdrawal symptoms. In some cases this is a medical emergency requiring admission to ITU



Acute drug effects – other drugs

Cocaine/crack

Stimulant drug with effects on dopamine

Binge pattern of use.

High doses can lead to intoxication, fits, hypertension, ischemia (MI, ischaemic stroke, intestinal infarction, rhabdomyolysis)

Hallucinogens – e.g. LSD

Acute psychotic symptoms



Chronic complications

Physical complications - Infections:

- Lack of venous access due to repeated episodes of thrombophlebitis
- Mainly related to injecting – e.g. abscesses, cellulitis, septicaemia, acute endocarditis,
- Rare complication such as botulism, tetanus and anthrax



Chronic complications

Other vascular complications:

- Groin injecting
- Deep Vein Thrombosis with secondary pulmonary embolus
- Acute endocarditis – infection of the heart valves
- Ischaemia from injecting into an artery and causing a blockage down-stream with secondary compartment syndrome



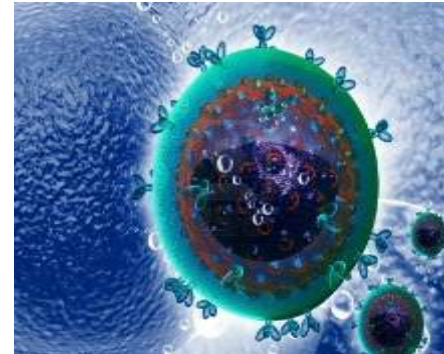
Effects due to route of administration

Intravenous -

complications of sharing equipment – blood borne viruses e.g. HIV, hepatitis C and B

Smoking – effects of smoking crack on lung function

Snorting – perforated septum



Withdrawal and dependency effects

Opiate withdrawal

Sweaty, mild tremor, muscle aches, muscle jerks, abdominal cramps and diarrhoea, piloerection, dilated pupils, runny nose, yawning, nausea.

Treatment

In A&E/GP substitute drugs such as methadone not usually prescribed

Symptomatic medications, e.g. diazepam, loperamide, buscopan

On AMU may need to prescribe methadone to prevent further withdrawal symptoms, patient using drugs on the ward or patient discharging self

Seek advice

Withdrawal and dependency effects

GBL withdrawal

From mild anxiety to confusion, agitation, tremor, muscular cramps, insomnia, combativeness, delirium, delusions, paranoia with hallucinations (auditory, tactile and visual), tachycardia, hypotension

Treatment

with benzodiazepines and Baclofen.
May need admission to ITU

Benzodiazepine withdrawal:

Anxiety, depersonalisation and derealisation, sensitivity to light and sound, fits

Treatment

Diazepam detoxification

Drug-seeking behaviour

Drug-seeking behaviour:

requests for specific opioids, especially high potency, short acting and intravenous formulations

vague and incongruent signs and symptoms of pain
self diagnoses (e.g. pancreatitis)

‘Doctor shopping’ at GPs and other A&E departments
requests to replace lost Methadone or Buprenorphine;
requests for benzodiazepines to prevent withdrawal fits

CAUTION: patient may not be drug seeking and may be genuinely ill and in pain!

Managing opiate dependence on the AMU/GP

Clinical Opiate Withdrawal Scale (COWS)

History:

Confirm history of opiate use (heroin, Methadone, Buprenorphine, other opioids)

Confirm history of dependence withdrawal symptoms when stops using, e.g. COWS.

Confirm treatment history – is patient on a prescription for Methadone or Buprenorphine – if so confirm with treatment agency and community pharmacy

Patient's Name: _____		Date: _____	
Times: _____		_____	_____
Resting Pulse Rate: (record beats per minute) <i>Measured after patient is sitting or lying for one minute.</i> 0 pulse rate 80 or below 1 pulse rate 81-100 2 pulse rate 101-120 4 pulse rate greater than 120			
Sweating: <i>over past ½ hour not accounted for by room temperature or patient activity.</i> 0 no report of chills or flushing 1 subjective report of chills or flushing 2 flushed or observable moistness on face 3 beads of sweat on brow or face 4 sweat streaming off face			
Restlessness <i>Observation during assessment</i> 0 able to sit still 1 reports difficulty sitting still, but is able to do so 3 frequent shifting or extraneous movements of legs/arms 5 Unable to sit still for more than a few seconds			
Pupil size 0 pupils pinned or normal size for room light 1 pupils possibly larger than normal for room light 2 pupils moderately dilated 5 pupils so dilated that only the rim of the iris is visible			
Bone or Joint aches <i>If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored.</i> 0 not present 1 mild diffuse discomfort 2 patient reports severe diffuse aching of joints/ muscles 4 patient is rubbing joints or muscles and is unable to sit still because of discomfort			
Runny nose or tearing <i>Not accounted for by cold symptoms or allergies</i> 0 not present 1 nasal stuffiness or unusually moist eyes 2 nose running or tearing 4 nose constantly running or tears streaming down cheeks			
GI Upset: <i>over last ½ hour</i> 0 no GI symptoms 1 stomach cramps 2 nausea or loose stool 3 vomiting or diarrhea 5 Multiple episodes of diarrhea or vomiting			

Managing opiate dependence

Examination:

Examine for signs of drug use
(e.g. injection sites) and for
withdrawal symptoms

Do urine drug screen UDS



Treatment:

Follow protocol for prescribing
Methadone or Buprenorphine

Prescribed Medication	No prescribed medication	
Ur. Creatinine conc.	12.08	mmol/L []
Urine Drug Screen		
Opiates	NEGATIVE	
Methadone	NEGATIVE	
Cocaine Metabolites	POSITIVE	
Amphetamines	NEGATIVE	
Benzodiazepines	POSITIVE	
Cannabinoids	NEGATIVE	
Ur. pH	7.00	[4.5 - 7.8]

Methadone prescribing protocol

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OPIATE ADDICTION – MANAGEMENT OF HOSPITAL IN-PATIENTS

This summary should only be used as part of the immediate assessment and management of patients

During normal hours, contact the Substance Misuse Service - see next page

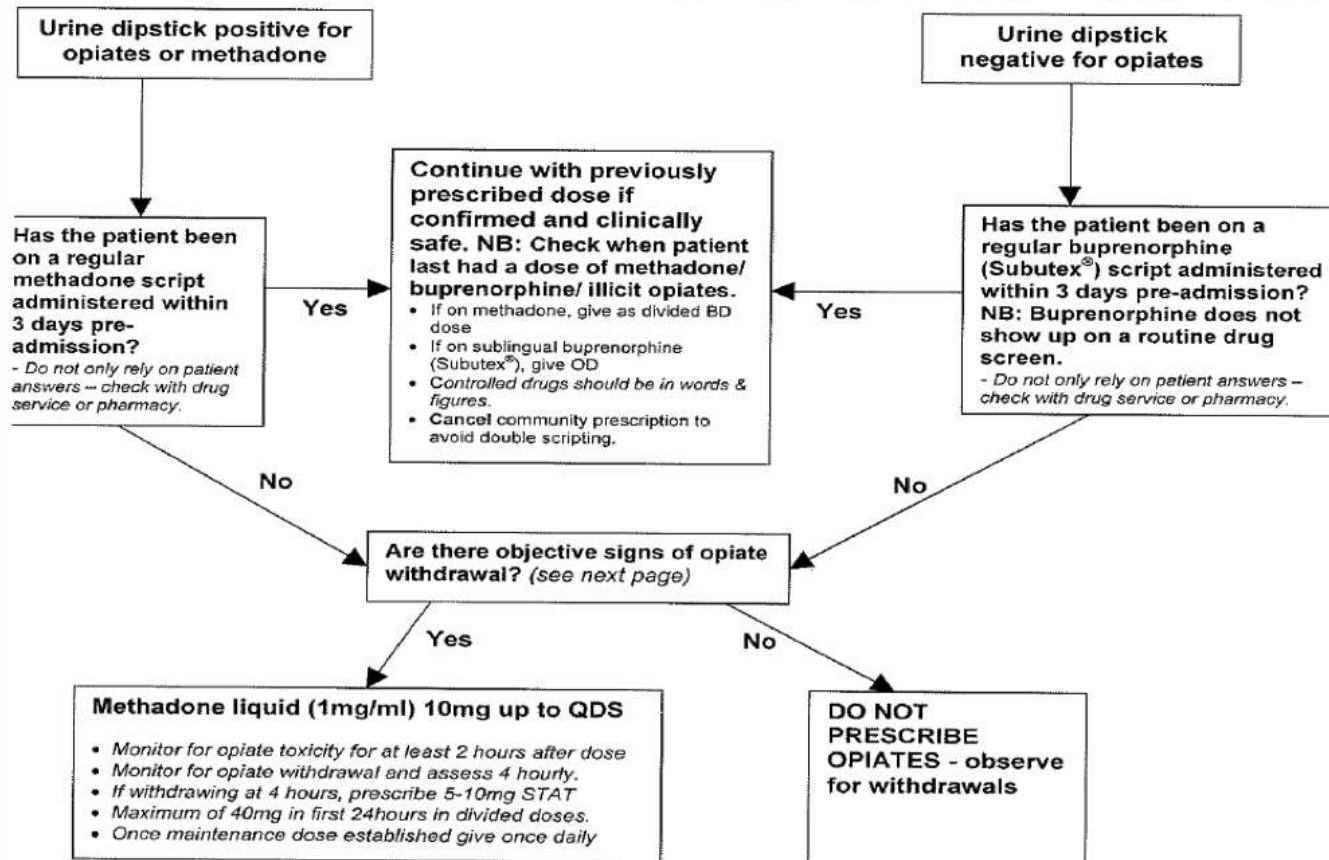


PATIENT HISTORY

- Establish current opiate use
 - what drug(s), amount, frequency, duration of use, last use, withdrawal symptoms and cautions/ contra-indications to methadone prescribing.
 - Is the patient currently in possession of drug(s)?
- Enquire about other substance misuse especially alcohol and benzodiazepines
- Enquire about Hep C, Hep B and HIV status.

EXAMINATION

- Evidence of drug use (e.g. needle marks, thrombosed veins, cellulitis and old scars)
 - Observe for signs of opioid intoxication or withdrawal (see next page)
 - Urine dipsticks testing for opiates (morphine) and/or methadone if available
 - Request 'urine drugs of abuse screen' from **clinical biochemistry**.
- Note: Buprenorphine urine assays are not readily available at UCLH or RFH*



- Always write on drug chart '**OMIT IF SEDATED OR INTOXICATED**'.
- Divided doses of methadone should be BD or up to QDS. **Avoid doses after 18.00hrs.**
- Only prescribe **methadone oral solution (1mg/ml)** – do not prescribe tablets or injection.
- Prescribe **all methadone and buprenorphine doses / frequencies in WORDS & FIGURES.**
- Ensure there is immediate access to **Naloxone.**
- Fatal respiratory depression can occur with methadone doses of 30mg or lower in non-tolerant individuals or if combined with other opiates, alcohol or benzodiazepines (e.g. chlordiazepoxide, diazepam). Buprenorphine can similarly cause respiratory depression if combined with other opiates.

Drug misuse and dependence presentations to GP

At registration - screening questions for drug use

Repeated absences from work and requests for sick certificates

Requests for opioid pain relief or benzodiazepines

Depression / anxiety / sleep problems

Drug misuse and dependence presentations to GP

Weight loss

Abnormal LFT

Screening Hepatitis B,C

HIV

Pregnant drug user

Concerned parents

Specific requests for help with drug problems

Testcode	Description	Value	Units	Range	Abnormal flag
PT	Prothrombin Time	11.1	secs	10.0-12.0	
INR	INR	1.04			
APTT	APTT	35	secs	22-41	
APRA	APTT Ratio	1.1		0.7-1.3	
TT	Thrombin Time	16	secs	9-15	H
NA	Sodium	135	mmol/L	135-145	
K	Potassium	4.4	mmol/L	3.5-5.1	
UREA	Urea	6.7	mmol/L	1.7-8.3	
CREA	Creatinine	75	umol/L	66-112	
GFR	Estimated GFR	>90			
GFR	Estimated GFR	Value: COMMENTS: Units: mL/min/1.73sqm Multiply eGFR by 1.21 for people of African Caribbean origin. Interpret with regard to UK CKD guidelines: www.renal.org/CKD/guide/ckd.html Use with caution for adjusting drug dosages - contact clinical pharmacist for advice.			
GGT	Gamma glutamyl transferase	86	IU/L	10-71	H
BILI	Bilirubin (total)	39	umol/L	0-20	H
ALP	Alkaline phosphatase	109	IU/L	40-129	
ALT	Alanine transaminase	20	IU/L	10-50	
ALB	Albumin	37	g/L	34-50	

Management in primary care



Brief intervention by GP, practice nurse or counsellor [IAPT]

Referral to self-help or mutual aid, e.g. AA, NA

Shared care with local substance misuse service.

Referral to acute hospital for secondary complications of use

Priory 28 day ATP programme

Golden rules of safe prescribing

In patients with chronic anxiety, chronic pain and drug alcohol problems - be cautious about prescribing benzos, sedating antidepressants, antipsychotics, pregabalin, gabapentin, opiate analgesics and sleeping tablets, all of which can increase the risk of iatrogenic dependency, harm and death.

Ensure that benzodiazepines used during an acute admission on the wards are tailed off to zero preferably before the patient is discharged from the wards to GP care.

Use clear and simple instructions in your discharge letter to GPs/referrers, e.g.

“The patient required a short admission for what we believe to be a transient drug induced state rather than an underlying functional mental illness such as Schizophrenia. We started low dose antipsychotic for a few weeks.

GP – PLEASE ensure that you withdraw this off in the next 2-4 weeks, by reducing as follows.....

GP – In order to prevent possible deviation from this plan, we took the time to explain this to the patient during their stay on the ward and they will be aware of the plan to reduce and stop medication “.....” when they present to you at the GP health centre/surgery. Please do not hesitate to contact us should you need further support/advice”.

Before you prescribe consider...



1. What psycho-social aspects of a patient's life can be improved first?
2. Can some psychology and psychological skills learnt by the patient help?
3. What is the pathology?
4. Does the patient meet diagnostic criteria for a disorder/illness in ICD-10?
5. What tool can I use to measure the pathology before and after starting a medication to gauge whether the medication I prescribe is of value?
6. What will I do if the medication isn't effective?
7. What are the long term risks and problems if I start this medication and patient stays on it for the distant future/ for life?

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Proposed alternate
descent route

Hillary Step
Standard Route

Never be 'pressurised/forced' into prescribing a medication that you consider to be unwarranted or potentially harmful further down the line. Be firm and polite to the patient but say 'No' and explain why.

Adhere to prescribing protocols.

If it's not of any benefit then it can only be doing some harm.



Thank You - Any questions?



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Priory offers a **free initial assessment** at all of our addiction rehab facilities to help individuals discuss their addiction in confidence.

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