Drug and alcohol misuse workshop

Person Centered Medicine from Bench to Bedside (PHA-6020Y)

Clinical Workshop

Drug and alcohol misuse is a substantial problem within people who are mentally ill. This is often referred to as dual diagnosis.

The purpose of the lecture material and workshop is for you to:

- To improve your understanding and knowledge of drug and alcohol misuse
- Review case studies and interpret patient data into how drug and alcohol misuse may affect mental health. From the case studies the questions will direct you to:
    a. Identify care issues
    b. Formulate care interventions

The information you need to answer the questions are in the lecture and supplementary material on BB.

Please answer the questions and we will work through the case studies on 18th March 2024

Task 1: Calculating alcohol usage

1) Complete the table below calculating the number of units of alcohol from each entry in the alcohol diary:

	alcohol consumed	Number of units
Monday	2 large glasses wine & one small beer	**8.6**
Tuesday	None	
Wednesday	2 small beers & one G&T	**3.3**
Thursday	3 double G&Ts	**6**
Friday	3 small beers & 2 large G&Ts	**7.4**
Saturday	Bottle of wine	**9 or 10**
Sunday	2 small beers & 1 large G&T	**4.3**

2) How many units are being consumed per week? (The figure will be a guide as the strength and (ABV) and size of measures is unknown)

Approx. 40

3) What is the AUDIT C score?

10

References:

https://www.e-lfh.org.uk/programmes/alcohol/

Scroll down to 'Have a word Top 30 slides' and 'Have a word unit wheel'- from this you should be able to work out the approximate number of units consumed and the audit C score

Case study 1

WN is a new admission to the acute psychiatric ward

- WN is a 22-year-old male trainee accountant and was admitted to hospital with a possible psychotic episode
- Friends found him naked in his bedroom cutting himself and called an ambulance. He was taken to Casualty
- In Casualty WN was given 1mg lorazepam and 5mg haloperidol I/M (to calm him down and reduce agitation), after he was aggressive towards nursing staff. WN was transferred to a mental health ward
- WN didn't know where he was and could not recollect previous events. He was rambling and talking about insects that he needed to cut out of his arms. His mood was elevated and lively.

Family History

- Good schooling, achieved well, math's degree. Family are caring and his mother takes antidepressants

Social History

- Lots of friends, smokes, alcohol consumption: 'a few beers per week'

Drug History

- WN stated that he is on a reducing methadone script and doesn't want his parents to know that he had "got into a bit of trouble with heroin". He is currently taking methadone 20mg a day maintenance
- He confesses to taking cocaine as well
- He has been smoking cannabis since his mid-teens
- **Fluoxetine 20mg** - he has been taking this since he was 16yrs

Previous Medical History

- Depression since he was 16 years' old

1) What would you do to confirm WN has been taking opioids, cocaine and cannabis?

- Urine drug screen which will confirm all illicit drugs
- Contact the pharmacy who dispenses the prescription to confirm dependence and check what dose is on the script
- Once dependence is confirmed, you can suggest the ward staff use withdrawal scales (COWS) to monitor symptoms of withdrawal as he has not taken methadone for 4 days

2) You contact the community pharmacist who informs you that WN did not collect his methadone script for 4 days. The junior doctor suggests prescribing 20mg/d methadone. Do you agree with this dose and what is the rationale for your answer?

- You inform the medical staff about possible loss of tolerance after 3 days
- Community pharmacies should not dispense methadone after 3 missed doses
- Ask WN if he has used heroin instead of methadone or if he has purchased any street methadone, this could affect the dose prescribed. However, WN may not be communicative.
- Inform drug agency he has not collected his prescription for 4 days
- WN has been confirmed as positive for opioids but his tolerance may be reduced
- You would recommend prescribing a **reduced dose** and titrate against withdrawals using the COWS withdrawal scales
- Remember that once tolerance is reduced with opioids then there is a risk of overdose

3) You discover that WN is on a reducing script for methadone. The lead nurse asks you to have a chat to WN about his methadone dose. What do you discuss?

- WN has already missed 4 days methadone and this may be an opportunity for him to take a reduced dose to help with the methadone reduction
- If you are able to, discuss with WN and aim for a reduction
- However, be aware as he is currently experiencing a psychotic episode, withdrawal symptoms may be difficult to ascertain and WN may be difficult to engage.

4) WN has been smoking cannabis since his teens. What is his risk of psychosis?

- There is evidence that cannabis use increases the risk of psychosis
- Teenagers are particularly vulnerable because the brain is still developing up until about the age of 21 years
- Schizophrenia and Cannabis:
- Schizophrenia has many possible causes e.g. genetics, environmental, trigger
- Cannabis leads to dopamine being released
- Many symptoms of schizophrenia are caused by excess dopamine
- Cannabis (THC) can induce psychosis, especially highly concentrated versions e.g. skunk
- Cannabis alone does not cause schizophrenia
- **But** it can be a trigger factor (combining with other factors) to precipitate psychosis
- Risk may be higher if started early or high doses are taken
- There is no evidence of a rise in schizophrenia with increased use of cannabis (1996-2005-date)

Summary and advice:

- Use by vulnerable young people should be discouraged
- Around a third of FEP (First Episode Psychosis) had their first symptoms after cannabis
- In someone with schizophrenia, stopping cannabis may cause clear improvement
- Cannabis should be avoided if it makes psychotic symptoms worse
- If compliance is good, positive schizophrenia symptoms are unchanged, occasional use is probably OK (pragmatic remark!)
- But more research is needed e.g. Are there brain changes? Memory impairment? Cognitive impairment? Are these pre-existing, permanent or reversible? How relevant is age of first use?

WN responds very well and is discharged from the ward after 5 days.

He is also discharged on methadone 10mg daily and his regular fluoxetine 20mg daily.

Before discharge, the nurse asks you to have a chat with WN to discuss his medication and illicit use.

5) What will you discuss?

Mental state of WN- you will learn this in the depression session(s)

- WN is currently taking fluoxetine 20mg daily - ask him about his mental health and whether he feels this is an adequate dose, could increase to 40mg depending on mood. Think about switching if not effective at 40mg/d. 20mg is optimum in most people

- **Remember to optimise the dose before switching to another antidepressant**
    - Self-medication with alcohol and illicit substances is often a sign that mental health is not being well controlled, or sleep is poor
    - May need antipsychotic in long term to avoid relapse and psychosis should be monitored
- Overshadowing effect of physical health - this means that physical health in a patient is often over shadowed and neglected by the mental health

Illicit substances

- **Cocaine** is associated with cardiac rhythm disturbances and best avoided when taking methadone. It is a stimulant and if taken in excess it can deplete dopamine stores in the brain thus causing psychosis. This can be difficult to distinguish from schizophrenia (covered in the schizophrenia sessions)
- **Poly-substance** misuse increases the risk of accidental overdose and self-harm
- **Cannabis -** effects on mental health- see lecture material
- Carry out an **AUDIT-C** questionnaire on WN and give him advice on alcohol consumption. Alcohol is a depressant which has long term health risks (you should detail the risks here)
- You could signpost him to an agency specialising in alcohol misuse
- Point out that he would be putting his professional career in jeopardy by using substances
- Signpost to **psychological** therapies - this may help with regard to stimulants and cannabis misuse

Harm minimisation

- Education and advice, storage of methadone
- Pharmacists are key individuals in the success of methadone treatment
- How does he use illicit drugs? Smoking or injecting? (smoking less harm than injecting)
- **Driving -** DVLA should be notified if a patient is suffering from an acute illness - patient responsibility
- **Adherence** to prescribed medication
- **Smoking cessation advice - risk to health**

Case study 2

MN comes into your pharmacy and asks you for some herbal Nytol® to help her sleep

- MN is a regular customer and in conversation with MN you ask her how she is as her husband died 3 months ago
- She stated that she has poor sleep is and can't function during the day, she asks for some herbal Nytol®
- She is currently off sick from work
- She appears anxious
- You notice from her prescription that she is currently taking zopiclone and diazepam. She states that she is worried about getting addicted to them so doesn't take them very much
- She confesses that alcohol is helping her but then she wakes up feeling low

Family History

- Mother alive and well, her father died from liver disease. Husband died from cancer 3 months ago, she has two children at University

Social History

- MN has some friends but can't face them. She doesn't smoke but consumes alcohol

Drug History

- Diazepam 2mg four times each day when required for agitation
- Zopiclone 3.75mg bedtime when required to help sleep

You have some time and ask MN if she would like a consultation? She is very grateful as she doesn't like to bother her GP again.

- Nytol is diphenhydramine 50mg, an antihistamine, 20 minutes before bedtime
- Nytol Herbal is Hops, Valerian, Passion Flower ('3 natural active ingredients')

1) During the consultation you calculate that MN has an audit C score above 10 – what would this indicate?

- 10 (This is important for you to know what a score of 10 means after undertaking an AUDIT-C)- indicates higher risk from alcohol consumption

2) What would you say to MN in a brief intervention about her alcohol misuse

- Discuss **Audit C** and what it means

- Often just discussing her use and number of units recommended will decrease consumption. She may be unaware she is consuming so much
- She has had a recent bereavement and may be self-medicating with alcohol to help her with the trauma. Query whether she might need an antidepressant
- Genetic and/or environmental component? Father alcoholic

The potential benefits of cutting down alcohol:
Physical:

- Sleep better
- More energy
- Lose weight
- Reduce risk of injury
- Improve memory
- Better physical shape
- Reduce risk of high BP
- Reduce risk of cancer
- Reduce risk of liver disease
- Reduce risk of brain damage

Psychological/Social/Financial:

- Improved mood
- Improved relationships
- Reduce risk of drink driving
- Save money

Support her in making a plan for a reduction:

- Sign post to AA
- Use an alcohol diary to record consumption and reduction
- Use alcohol with lower ABV (ie lower percentage)
- Allow 2 alcohol free days together as recommended by guidelines

'Frames' can be used a guide for brief interventions

a. Feedback: on an individual's alcohol use and the risk of harm from their current rate of consumption or drinking pattern
b. Responsibility: emphasise that drinking is by choice
c. Advice: increase the individual's self-belief and CONFIDENCE in their ability to change their drinking behaviour
d. Menu: offer alternative goals and coping STRATEGIES i.e. 2 drink free days together, once adequately treated with an antidepressant then the need for alcohol as a coping mechanism will be reduced
e. Empathy: role of the pharmacist showing non-judgemental approach

Self-efficacy: installing optimism that chosen goals can be achieved

3) Would you sell MN some Nytol®? - please justify your answers

- There would be no need for Nytol if diazepam and zopiclone were taken in the short term
- Taking Nytol combined with prescribed meds and alcohol will increase sedation
- Advise against Nytol, although is a short-term option

4) What would you say to MN about her diazepam and zopiclone usage? https://bnf.nice.org.uk/treatment-summary/hypnotics-and-anxiolytics.html

- Re-assure her that they are both safe in the short term 2-4 weeks and the risk of tolerance and addiction will then be reduced
- Caution her against taking benzos and z drugs with alcohol as this can cause respiratory depression/overdose and so it is not safe to do so
- MN may need an antidepressant to help with anxiety, diazepam and alcohol are not the long-term answer
- Give advice on sleep hygiene and by reducing alcohol consumption will improve her sleep. Insomnia is very common after a bereavement and so zopiclone taken regularly in the short term would help her

5) Two weeks later, MN returns to see you and is feeling much better but she has a prescription for thiamine 100mg a day. She is unsure what it is for and is asking for information about it. What do you say to her?

https://www.choiceandmedication.org/nsft/generate/pillthiamine.pdf

- People at high risk of drinking alcohol often have low levels of thiamine, because of:
  - Poor eating habits, vomit, alcohol can damage stomach lining- hence poor absorption of thiamine which can lead to Wernicke's (uncontrollable eye movements, poor co-ordination (ataxia), confusion and memory loss
  - Ocular disturbances (ophthalmoplegia)
  - Changes in mental state (dementia)
  - Unsteady stance and gait (ataxia)
  - Can lead to Korsakoff's psychosis - irreversible

- Emphasize the importance of a good diet and explain why thiamine is necessary
- Also 100mg/d better as 50mg BD or 25mg TDS/QDS

- This is also a good opportunity to discuss her alcohol consumption again and perhaps perform another Audit C