

Pharmacological treatment of cannabis use disorders

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Faculty Disclosure

х	No, nothing to disclose	
	Yes, please specify:	

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Inhoud

- Introduction 1.
- 2. When do we start treatment?
- 3. Pharmacological options
- 4. Conclusion



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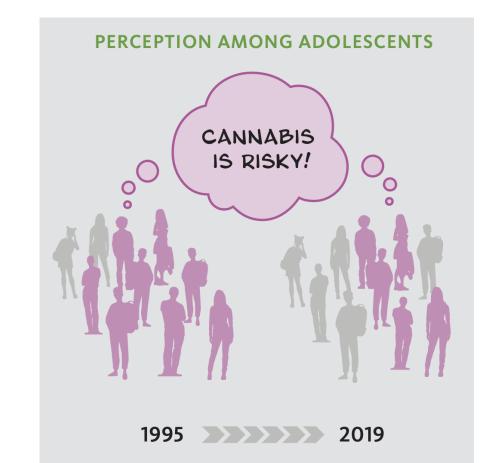
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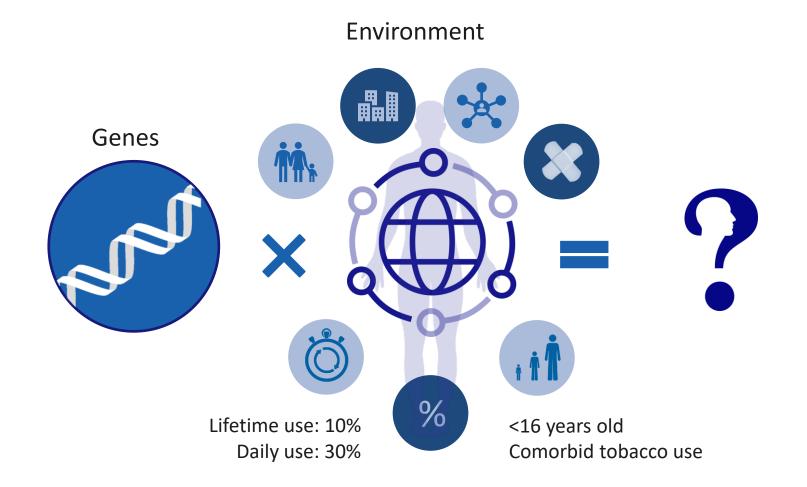






Batalla A, et al. Eur Neuropsychopharmacol. 2021. UNODC. Drug market trends: cannabis, opioids. 2021.

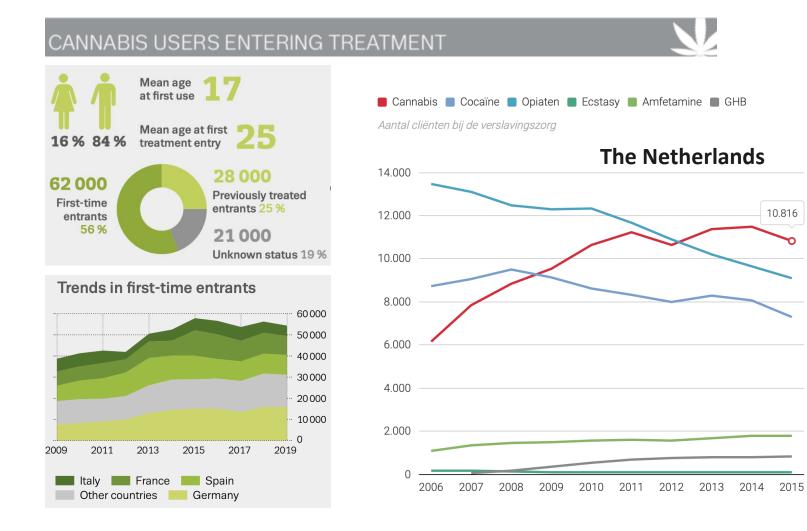
Introduction Risk and protective factors





Introduction

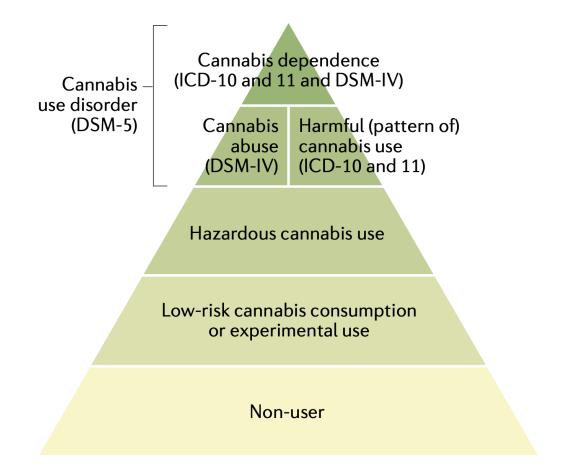
Trends in addiction treatment (EU and NL)





EMCDDA. 2021. European Drug Report. Trimbos. 2021. Nationale Drug Monitor.

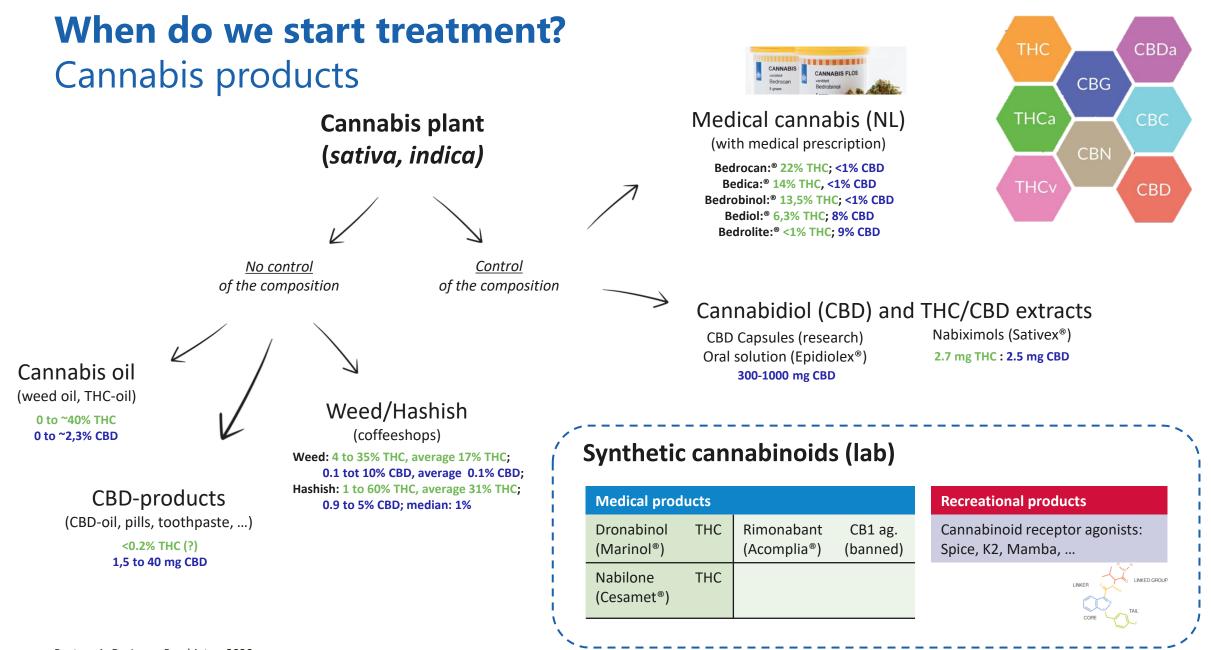
When do we start treatment? Good clinical practices



Good clinical practices

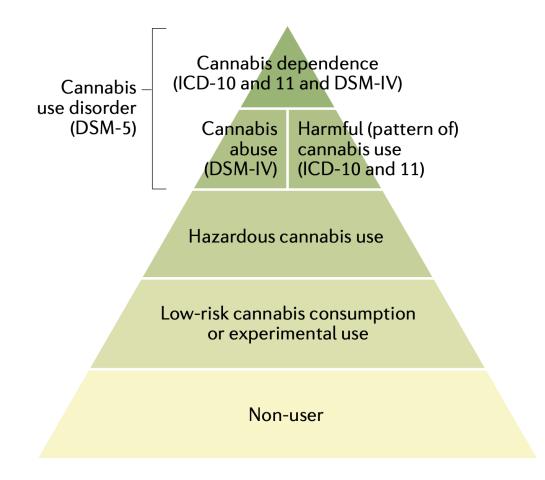
(Minimum) assessment -Product/mode of administration -Quantity -Frequency





Postma A. De Jonge Psychiater. 2020. Spindle TR. JAMA Network Open. 2022.

When do we start treatment? Cannabis toolkit



Good clinical practices

(Minimum) assessment -Product/mode of administration -Quantity -Frequency

-BONUS

*THC/CBD estimation: iCannToolkit → Standard THC unit (STU) = 5mg THC *Screening substance use in those with psychiatric disorders: ASSIST



Connor JPC, et al. 2021. Nature reviews. Freeman TP & Lorenzetti V. 2021. The Lancet. DSM = Diagnostic and Statistical Manual of Mental Disorders ICD = International Classification of Diseases ASSIST = Alcohol, Smoking and Substance Involvement Screening Test

When do we start treatment? Screening: ASSIST

THE TYPE OF INTERVENTION IS DETERMINED BY THE PATIENT'S SPECIFIC SUBSTANCE INVOLVEMENT SCORE

	Record specific	no intervention	receive brief	more intensive
	substance score		intervention	treatment *
a. tobacco		0 - 3	4 - 26	27+
b. alcohol		0 - 10	11 - 26	27+
c. cannabis		0 - 3	4 - 26	27+
d. cocaine		0 - 3	4 - 26	27+
e. amphetamine		0 - 3	4 - 26	27+
f. inhalants		0 - 3	4 - 26	27+
g. sedatives		0 - 3	4 - 26	27+
h. hallucinogens		0 - 3	4 - 26	27+
i. opioids		0 - 3	4 - 26	27+
j. other drugs		0 - 3	4 - 26	27+

NOTE: *FURTHER ASSESSMENT AND MORE INTENSIVE TREATMENT may be provided by the health professional(s) within your primary care setting, or, by a specialist drug and alcohol treatment service when available.



Treatment scenarios

- -Intoxication
- -Detoxification
- -Relapse prevention



MI = Motivational interviewing CM = Contingency management CBT = Cognitive behavioral therapy

Pharmacological treatment Intoxication & detoxification

Intoxication

- No antidote (symptom reduction)
- In case of severe restlessness/agitation/psychosis: low dose benzodiazepines (e.g. 10-40 mg diazepam)

Detoxification

- Start: 1-2 days, up to 20 days
- Insomnia, irritability, headache, sadness, restlessness, anxiety, decreased appetite, agitation, craving, ...
- Benzodiazepines, *synthetic cannabinoids (dronabinol, nabilone, nabiximols)* in certain cases; no evidence/need for generalized use



Relapse prevention

Cannabis agonists	Trials	Main findings	Needs
Nabilone, dronabinol, nabiximols	4	Reduction in cannabis withdrawal; not abstinence	Replication/large-scale studies required
Fatty acid amide hydrolase (FAAH) inhibitor	1	Reduction in cannabis withdrawal	Replication/large-scale studies required

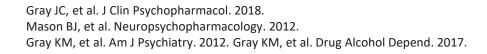
Cannabinoids	Trials	Main findings	Needs
Cannabidiol (CBD)	1	Increased abstinence, on average, 0.5 days per week	Replication/large-scale studies required



Relapse prevention

Anticonvulsants	Trials	Main findings	Needs
Topiramate	1	Decreased use, not abstinence	Replication required
Gabapentin	1	Reduction on cannabis use and withdrawal	Validation trial required (low retention rates)

Mucolytics	Trials	Main findings	Needs
N-acetylcysteine	2	Abstinence, not replicated in larger trial	Replication required





Relapse prevention

Neuropeptides	Trials	Main findings	Needs
Oxytocin	1	No reduction on craving	Validation trial required (n=8)

Nicotinic partial agonists	Trials	Main findings	Needs
Varenicline	1	Reduction on cannabis use and craving	Validation trial required (n=7)

Other (less support/negative trials)

Selective serotonin reuptake inhibitors (SSRI), bupropion, buspirone, atomoxetine



McRae-Clark AL, et al. Psychopharmacology. 2013. Adams TR, et al. J Psychoact Drugs. 2018. Nielsen S, et al. Cochrane Database Syst. Rev. 2019.

Background participants

Study characteristics			
Total number	12		
Publication date	>2012		
Location	85% US		
Duration	1d-12weeks		
Psychotherapy	85%		

Participants	
Total participants	1040 (n=7-302)
Male	50-100%; 75%
Caucasian	50-75%
Age	15-50; mostly adults



Overall conclusion

- ✓ Growing demand for treatment of cannabis use disorders
- Cannabis use assessment: Cannabis toolkit (STU = 5mg THC)
- ✓ There are **no pharmacological treatments** approved
- ✓ Cannabinoids (e.g. CBD, FAAH inhibitors) are promising compounds
- ✓ Trials are short and involve mainly adult Caucasian males from the US
- ✓ Replication and large trials are needed
- ✓ Psychotherapy is effective and still the only treatment option available





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