

Drug use disorder module - evidence profile DRU1: Brief psychosocial interventions for people using cannabis or stimulants

WHO mhGAP guideline update: Mental Health Gap Action Programme (mhGAP) guideline for mental, neurological and substance use disorders

2023

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Mental Health Gap Action Programme (mhGAP) guideline for mental, neurological and substance use disorders, available at: <https://www.who.int/publications/i/item/9789240084278>

1. Background

Cannabis continues to be the most widely used drug worldwide¹. UNODC estimates that almost 4 per cent of the global population aged 15-64 years used cannabis at least once in 2019¹. The stimulants use prevalence is 0.4 per cent among adult population aged 15-64 years in 2019 for cocaine¹ and 0.5 per cent of the global population for amphetamines¹.

Several psychosocial interventions are used to treat cannabis and stimulants dependence. A recent guideline recommends psychosocial interventions for both disorders^{2,3}. Commonly used psychosocial interventions include cognitive-behavioural therapy (CBT), motivational interventions, 12-step facilitation therapy, contingency management, and family interventions³. CBT helps individuals positively address unhealthy drug use behaviours by identifying and correcting maladaptive thought patterns, goal setting, and learning and applying coping strategies. Motivational intervention techniques, such as motivational interviewing (MI) and Motivational Enhancement Therapy (MET), seek to positively impact unhealthy behaviours by eliciting and enhancing motivations to change. Contingency management is based on operant conditioning principles, utilizing an incentive-based approach that rewards behaviours that meet desired outcomes³. Twelve-step facilitation therapy actively engages individuals in a mutual support group guided by twelve-step principles. Family interventions actively engage the family and address contributing factors to drug use, such as family communication and conflict, school and work issues, and peer networks. Family interventions are often used for the treatment of adolescent substance misuse⁴.

Furthermore, all these approaches can guide the development of Brief Interventions. Brief intervention, is a structured, time-limited approach aiming to help individuals reduce or stop problematic substance use. Its intensity and duration ranges from a single short conversation (e.g. 1 or 2 sessions, each lasting less than 1 hour) to a few sessions (e.g. once or twice weekly sessions for 1 to 2 hours). Brief Intervention provides a substance use counselling model that can accommodate contexts such as medical settings or schools to broaden their engagement with individuals who may be engaging in problematic substance use⁵. They are usually associated with screening instruments for substance use-related problems. People with positive results on these tests are then offered brief counselling sessions. This approach can also become a bridge to a more intensive therapy in persons who require it⁶. They are often designed to be delivered opportunistically in most settings, including primary care where patients may be seeking help for problems unrelated to substance use. Brief Intervention can be delivered by professionals with limited training, thus facilitating access to treatment for a large number of individuals.

This report supplements a review for the World Health Organization (WHO) on screening for drug use in adults (18 years old or over), focusing on evidence examining the benefits of brief psychosocial interventions for persons with unhealthy cannabis or stimulants use.

2. Methodology

2.1. PICO question

Population (P): People who use cannabis or stimulants, such as methamphetamine, crack or cocaine.

Intervention (I): Brief Psychosocial Interventions

Comparator (C): Minimal intervention or Waitlist

Outcomes (O):

List critical outcomes:

- Cannabis or Stimulants Use
- Cannabis or Stimulants Dependence
- Harm from Cannabis or Stimulants Use

2.2. Search strategy

The research team for this review included five researchers. During the initial stage of the study, the primary author frequently met with a senior researcher and involved other team members at regular intervals to solicit ideas and feedback and in the final stages to discuss findings and arrive at judgements.

All studies that evaluated brief psychosocial interventions to reduce drug use, dependence, or harm from drug use among people who use cannabis or stimulants, such as crack, cocaine or methamphetamine. published until 31 January 2022, were searched from PubMed, Embase, Global Index Medicus, PsycInfo, Cochrane, Lilacs, Asian Index Medicus, African Index Medicus and ClinicalTrials.gov databases.

The search strategy from PubMed included key terms, “(cannabis use OR marijuana use OR stimulant use OR cocaine use OR amphetamine use OR crack use OR drug use OR drug harm OR harm OR drug dependence OR dependence OR cannabis dependence OR marijuana dependence OR stimulant dependence OR cocaine dependence OR crack dependence OR amphetamine dependence) AND (brief psychosocial OR brief psychosocial intervention)”. This strategy was adapted to the other databases searched. The strategy was adjusted to each database, accordingly, aiming to maximize the search results as much as possible within the scope of the review.

Inclusion criteria consisted of the following: (a) randomized and non-randomized controlled clinical trials studies examining brief psychosocial interventions to reduce drug use, dependence, or harm from drug use among people who use cannabis or stimulants quantitative, qualitative, or a mixed methods research design, (b) use a screening instrument to identify people with unhealthy cannabis or stimulant use.

The definition used in this review to “Brief Psychosocial Interventions” was 1 or 2 to sessions, each lasting less than 1 hour, not necessarily linked to the use of a specific screening instrument⁷.

2.3. Data collection and analysis

N/a.

2.4. Selection and coding of identified records

All identified studies were added to a Collection on Mendeley Reference Manager. Each of the five databases was categorized in individual groups within that Collection, allowing the researchers to access and analyse whether the reviews met the criteria for inclusion described in the topics above. A copy of

the reference library in electronic format (without attached pdfs of included publications) is supplied in the appendix.

2.5. Quality assessment

Quality of the included systematic review⁷ will be assessed using the AMSTAR quality appraisal tool https://amstar.ca/Amstar_Checklist.php and the certainty of evidence by GRADE (Grading of Recommendations Assessment, Development, and Evaluation) approach⁸, using the GRADEpro software⁹ available online to assess the quality of evidence among the RCTs included.

2.6. Analysis of subgroups or subsets

In data synthesis, the included articles were organized according to: 1) the population assessed into 3 groups (adults only, child and adolescents only and both), 2) location of sample recruitment (emergency department or not) and 3) the drug used by the study population into 3 groups (cannabis only, stimulants only and both).

3. Results

3.1. Systematic reviews and/or studies identified by the search process

Below are references of studies identified by the search process and selected for full text review:

Lilacs:

(Abreu, 2017)

PubMed:

(Tait, 2004; Tiburcio, 2018)

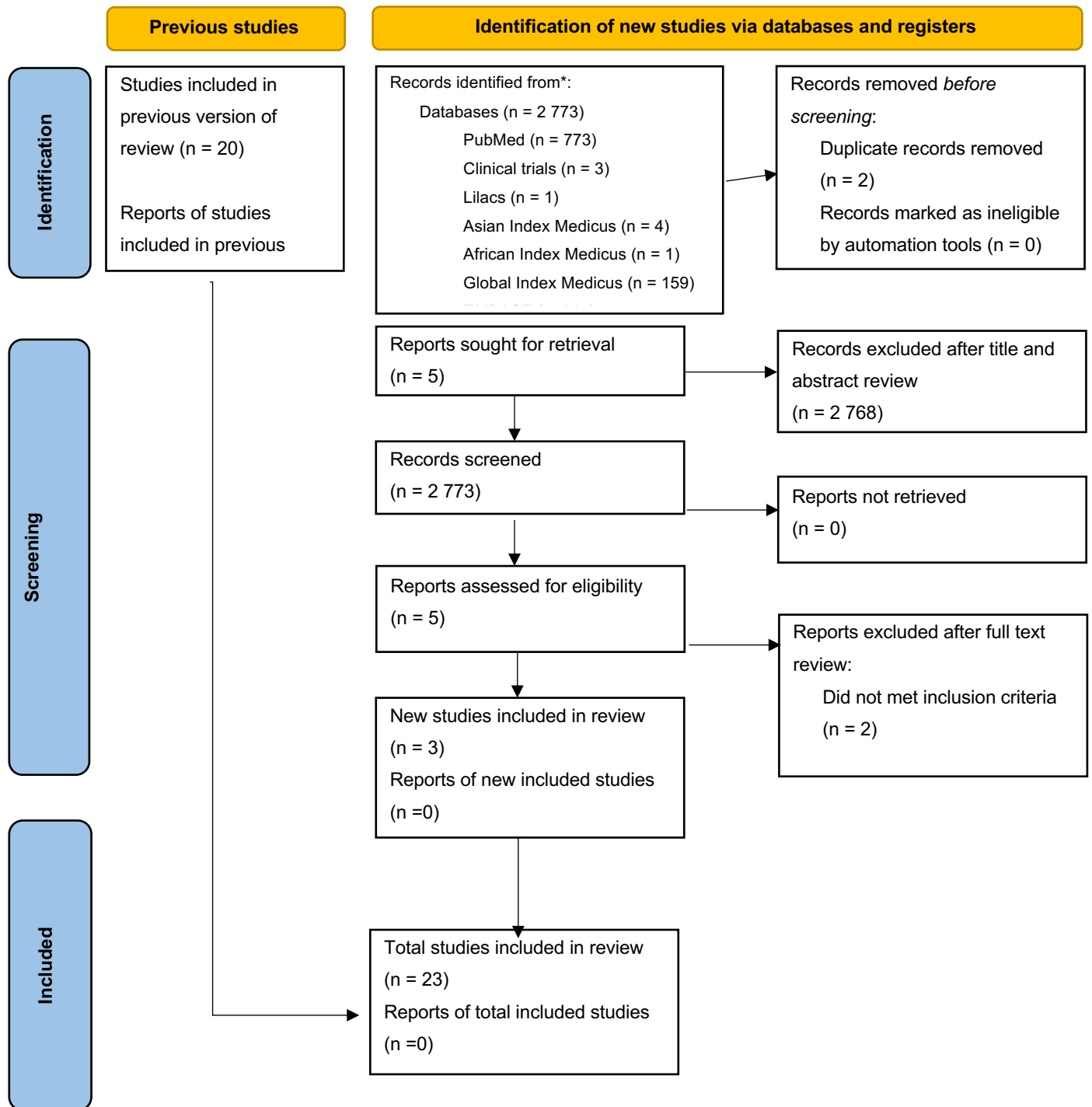
PsycInfo:

(Winters, 2014)

Base Review (Chou, 2020):

(Babor, 2004; Bogenschutz, 2011; Bonar, 2018; Gryczynski, 2016; Kim, 2016; Krupski, 2012; Martino, 2017; McCambridge, 2005; Saitz, 2014; Woolard, 2013; Baumeister, 2014; Bernstein, 2005; Bernstein, 2009; Blow, 2017; Bogenschutz, 2014; DeGee, 2014; Dembo, 2014; Fischer, 2011; Fischer, 2012; Fuster, 2015; Gelberg, 2015; Gelberg, 2017; Humeniuk, 2012; Marsden, 2006; Martin, 2018; McCambridge, 2004; Ondersma, 2007; Poblete, 2017; Roy-Byrne, 2014)

Fig. 1.: PRISMA 2020 flow diagram for updated systematic reviews which included searches of databases and registers only



3.2.1. Included in GRADE tables/footnotes

Table 1. PICO Table

Serial Number	Intervention/ Comparison	Outcomes	Systematic reviews (Name, Year)	Justification/Explanation for systematic review
19-05255-EF-2	Interventions (Psychosocial or Pharmacotherapy) X Minimal Interventions or Waitlist control	Reduce in Drug Use	Chou, 2020	This supplemental report to the USPSTF screening review addresses pharmacotherapy and psychosocial interventions to reduce drug use in persons engaging in opioid, cannabis, stimulant, or polysubstance use involving one or more of these drugs.

3.2.2. Excluded from GRADE tables/footnotes

None

3.3. Narrative description of studies that contributed to GRADE analysis

A U.S. Preventive Services Task Force (USPSTF) from 2008 report found no consistent evidence that counselling interventions are effective at reducing drug use or improving other health outcomes in populations whose drug use was identified through primary care-based screening with questions about drug use or drug-related risks.

Chou et al, 2020 updated a 2008 USPSTF report on screening for illicit drug use and supplemented an updated USPSTF report on screening for any drug use. This review focused on the benefits and harms of pharmacotherapy and psychosocial interventions for persons whose drug use was identified when a) seeking substance use treatment, b) presenting with signs or symptoms of drug use, and c) screened for drug use in primary care or other settings with questions about drug use or drug-related risks, or other means. The review included a total of 71 trials, with 19 trials of pharmacotherapies and 52 trials of psychosocial interventions.

Chou et al, 2020 concluded that pharmacotherapy and psychosocial interventions (brief interventions) are effective at improving drug use outcomes, but evidence of effectiveness remains primarily derived from trials conducted in treatment-seeking populations.

3.4. Grading the Evidence

Table 2a. Grading the Evidence of Base Review

Author(s): Chou R, Dana T, Blazina I, Grusing S, Fu R, Bougatsos C.

Date: June 2020

Question: Brief Interventions compared to waiting list for adults with Cannabis use disorders

Setting: Evidence from studies of persons seeking or referred for treatment for substance use or with clinical signs or symptoms of substance use might also be useful for informing assessments regarding screening in primary care settings.

Certainty assessment							No of patients		Effect		Certainty	Importance
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Brief Interventions	waiting list	Relative (95% CI)	Absolute (95% CI)		
Abstinence at 3- to 4-Month Followup												
7	randomized trials	serious ^a	serious ^b	not serious	very serious ^c	none	216/1045 (20.7%)	70/679 (10.3%)	RR 2.08 (1.51 to 3.07)	111 more per 1000 (from 53 more to 213 more)	⊕○○○ Very low	CRITICAL
Abstinence at 6- to 12-Month Followup												
4	randomized trials	serious ^d	serious ^e	not serious	serious ^f	none	103/433 (23.8%)	55/367 (15.0%)	RR 1.58 (1.17 to 3.06)	87 more per 1000 (from 25 more to 309 more)	⊕○○○ Very low	CRITICAL

CI: confidence interval; RR: risk ratioa. treatment seeking population only and not screen detected population

b. I squared: 28%

c. $P = 0.215$

d. only 1 RCT with screen detected population

e. I squared: 36.1%

f. $P = 0.196$

¹4 categories of quality of evidence: $\square\square\square\square$ (High), $\square\square\square\square$ (Moderate), $\square\square\square\square$ (Low), $\square\square\square\square$ (Very low). Examples are provided in the table.

²Recommendation: 2 grades – conditional or strong (for or against an intervention). Examples are provided in the table. Note: an alternative categorization of standard or strong is used for the conditions related to stress module.

Table 2b. Grading the Evidence of Base Review**Author(s):** Chou R, Dana T, Blazina I, Grusing S, Fu R, Bougatsos C.**Date:** June 2020**Question:** Brief Interventions compared to waiting list for Adults and adolescents with Stimulants use disorders**Setting:** Evidence from studies of persons seeking or referred for treatment for substance use or with clinical signs or symptoms of substance use might also be useful for informing assessments regarding screening in primary care settings.

Certainty assessment							№ of patients		Effect		Certainty	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Brief Interventions	waiting list	Relative (95% CI)	Absolute (95% CI)		
Abstinence at 6- to 12-Month Followup												
4	randomized trials	very serious ^a	very serious ^b	not serious	not serious	none	535/2420 (22.1%)	352/1871 (18.8%)	RR 1.25 (1.11 to 1.52)	47 more per 1000 (from 21 more to 98 more)	⊕○○○ Very low	CRITICAL

CI: confidence interval; **RR:** risk ratio

Explanations

a. only treatment seeking population

b. I squared 65.4%

Table 3a. Grading the Evidence of Update Review**Author(s):** Arcadepani, F.B**Date:** January 2022**Question:** Can psychosocial brief interventions to reduce cannabis use, dependence or harm?**Setting:** All studies that evaluated brief psychosocial interventions to reduce drug use, dependence, or harm from drug use among people who use cannabis or stimulants, such as crack, cocaine or methamphetamine.**Reference List:**

Certainty assessment							Impact	Certainty ¹	Importance ²
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations			
22 studies (cannabis)	Randomized Controlled Trials and Open Label Trials	Serious	Serious	Serious	Not serious	All potential confounders would reduce the demonstrated effect	<ul style="list-style-type: none"> Of 23 articles included in this update, 12 evaluated benefits of brief interventions among cannabis users, 1 among stimulants users and 10 among both (cannabis and/or stimulants). Sixteen articles showed benefits of brief interventions among cannabis and/or stimulants use, dependence or harm and 7 articles showed no benefits, when compared with control group. Of 22 articles that evaluated benefits of brief interventions among cannabis use, dependence or harm, 15 articles found that brief interventions can reduce cannabis use, dependence or harm. 	⊕⊕○○ Low	Critical

¹4 categories of quality of evidence: ⊕⊕⊕⊕ (High), ⊕⊕⊕○ (Moderate), ⊕⊕○○ (Low), ⊕○○○ (Very low). Examples are provided in the table.

²Recommendation: 2 grades – conditional or strong (for or against an intervention). Examples are provided in the table. Note: an alternative categorization of standard or strong is used for the conditions related to stress module.

Table 3b. Grading the Evidence of Update Review**Author(s):** Arcadepani, F.B**Date:** January 2022**Question:** Can psychosocial brief interventions to reduce stimulant use, dependence or harm?**Setting:** All studies that evaluated brief psychosocial interventions to reduce drug use, dependence, or harm from drug use among people who use cannabis or stimulants, such as crack, cocaine or methamphetamine.

nditions related to stress module.

Reference List:

Certainty assessment							Impact	Certainty ¹	Importance ²
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations			
11 studies (stimulants)	Randomized Controlled Trials and Open Label Trials	Serious	Very serious	Serious	Not serious	All potential confounders would reduce the demonstrated effect	<ul style="list-style-type: none"> Of 11 articles that evaluated benefits of brief interventions among stimulants use, dependence or harm, 6 articles found that brief interventions can reduce cannabis use, dependence or harm. 	⊕○○○ Very low	Critical

3.5. Additional evidence not mentioned in GRADE tables

This update guideline recommendation was based in a systematic review by Chou et al., 2020. First, we reviewed the articles included in Chou et al., 2020 study and selected 20 studies that evaluated brief interventions to reduce cannabis and/or stimulants use, dependence or harm and met the inclusion criteria. Furthermore, all studies that evaluated brief psychosocial interventions to reduce drug use, dependence, or harm from drug use among adults (aged 18 or over) published until 31 January 2022, were searched from PubMed, Lilacs, Asian Index Medicus, African Index Medicus and ClinicalTrials.gov databases and 3 articles were included. In total, 23 articles were included in this update guideline recommendation.

Of the 23 articles included, 16 articles showed benefits of brief interventions among cannabis and/or stimulants use, dependence or harm and 7 articles showed no benefits, when compared with control group.

Two articles evaluated individuals in emergency department. Of these, review by Bernstein et al., 2009 showed that screening and brief intervention promoted marijuana abstinence and reduced consumption among pediatric emergency department patients aged 14–21 years. The other article (Bogenschutz et al., 2014) evaluated emergency departments of 6 United States academic hospitals and did not find benefits in substance use outcomes among this sample of drug users seeking emergency medical treatment.

Of 23 articles included in this update, 12 evaluated benefits of brief interventions among cannabis users, 1 among stimulants users and 10 among both (cannabis and/or stimulants). Among the 7 articles that did not show a clear benefit of brief interventions in reducing drug use, dependence or harm, 5 evaluated both (cannabis and/or stimulants) users and 2 evaluated cannabis users exclusively.

4. From Evidence to Recommendations

4.1. Summary of findings

Table 4a. Summary of findings table of Base Review

GRADE Table	Source	Outcome	Number of Studies	Effects	Certainty of Evidence
GRADE Table 2a: Brief Interventions compared to waiting list for adults with Cannabis use disorders	-	Abstinence at 3- to 4-Month Follow up	7	RR 2.08 (1.51 to 3.07)	⊕○○○ Very low
		Abstinence at 6- to 12-Month Follow up	4	RR 1.58 (1.17 to 3.06)	⊕○○○ Very low
GRADE Table 2b: Brief Interventions compared to waiting list for Adults and adolescents with Stimulants use disorders		Abstinence at 6- to 12-Month Follow up	4	RR 1.25 (1.11 to 1.52)	⊕○○○ Very low

Table 4b. Summary of findings table of Update Review

GRADE Table	Source	Outcome	Number of Studies	Effects	Certainty of Evidence
GRADE Table 3: Brief Interventions compared to waiting list for Adults and adolescents with Cannabis and/or Stimulants use disorders	-	Reduce in cannabis and/or stimulants use, dependence or harm	23 (8 841 participants)	Of 22 articles (6 211 participants) that evaluated benefits of brief interventions among cannabis use, dependence or harm, 15 articles found that brief interventions can reduce cannabis use, dependence or harm. Of 11 articles (2 630 participants) that evaluated benefits of brief interventions among stimulants use, dependence or harm, 6 articles found that brief interventions can reduce cannabis use, dependence or harm.	Cannabis: ⊕⊕○○ Low Stimulants: ⊕○○○ Very low

4.2. Evidence to decision

Table 5. Evidence to decision table

Please note * indicates evidence from overarching qualitative review by Gronholm et al, 2023

	CRITERIA, QUESTIONS	JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
Priority of the problem	<p>Is the problem a priority? The more serious a problem is, the more likely it is that an option that addresses the problem should be a priority (e.g. diseases that are fatal or disabling are likely to be a higher priority than diseases that only cause minor distress). The more people who are affected, the more likely it is that an option that addresses the problem should be a priority.</p>			
	<ul style="list-style-type: none"> • Are the consequences of the problem serious (that is, severe or important in terms of the potential benefits or savings)? • Is the problem urgent? • Is it a recognized priority (such as based on a political or policy decision)? [Not relevant when an individual patient perspective is taken] 	<input type="checkbox"/> No <input type="checkbox"/> Probably no <input checked="" type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/> Don't know	<p>Drug use and drug use disorders constitute a public health, developmental and security problem both in developed and developing countries worldwide. According to the latest global estimates, about 5.5 per cent of the population aged between 15 and 64 years have used drugs at least once in the past year, while 36.3 million people, or 13 per cent of the total number of persons who use drugs, suffer from drug use disorders (UNODC, 2021). Approximately 0.5 million deaths annually attributable to drug use (UNODC, 2021).</p>	
Desirable Effects	<p>How substantial are the desirable anticipated effects? The larger the benefit, the more likely it is that an option should be recommended.</p>			
	<ul style="list-style-type: none"> • Judgements for each outcome for which there is a desirable effect • How substantial (large) are the desirable anticipated effects (including health and other benefits) of the option (taking into account the severity or importance of the desirable consequences and the number of people affected)? 	<input type="checkbox"/> Trivial <input type="checkbox"/> Small <input checked="" type="checkbox"/> Moderate <input type="checkbox"/> Large <input type="checkbox"/> Varies <input type="checkbox"/> Don't know	<p>Cannabis use, dependence or harm: Of 22 articles that evaluated benefits of brief interventions among cannabis use, dependence or harm, 15 articles found that brief interventions can reduce cannabis use, dependence or harm (Low Certainty of Evidence). Abstinence at 3-4 month follow-up (RR 2.08; 1.51 – 3.07) and Abstinence at 6-12</p>	

CRITERIA, QUESTIONS		JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
			<p>month follow-up (RR: 1.58; 1.17-3.06).</p> <p>Stimulants use, dependence or harm: Of 11 articles that evaluated benefits of brief interventions among stimulants use, dependence or harm, 6 articles found that brief interventions can reduce cannabis use, dependence or harm (Very Low Certainty of Evidence) Abstinence at 6-12 month follow-up (RR: 1.25; 1.11-1.52).</p>	
Undesirable Effects	<p>How substantial are the undesirable anticipated effects? The greater the harm, the less likely it is that an option should be recommended.</p>			
	<ul style="list-style-type: none"> • Judgements for each outcome for which there is an undesirable effect • How substantial (large) are the undesirable anticipated effects (including harms to health and other harms) of the option (taking into account the severity or importance of the adverse effects and the number of people affected)? 	<input type="checkbox"/> Large <input type="checkbox"/> Moderate <input type="checkbox"/> Small <input type="checkbox"/> Trivial <input type="checkbox"/> Varies <input checked="" type="checkbox"/> Don't know	<p>Not identified in the current review, but screening for illicit drug use disorders might increase detection of substance use disorders but has a number of potential implications. In some countries, health practitioners can be pressured to forward this information to the police or other authorities. Clinicians should be aware and cautious of potential implication for individuals screened positively in a given jurisdiction and offer it on the basis of informed consent and with caution regarding breaches in confidentiality.</p>	
Certainty of evidence	<p>What is the overall certainty of the evidence of effects? The less certain the evidence is for critical outcomes (those that are driving a recommendation), the less likely that an option should be recommended (or the more important it is likely to be to conduct a pilot study or impact evaluation, if it is recommended).</p>			
	<ul style="list-style-type: none"> • What is the overall certainty of this evidence of effects, across all of the outcomes that are critical to making a decision? • See GRADE guidance regarding detailed judgements 	<input checked="" type="checkbox"/> Very low <input checked="" type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High	<p>Cannabis: low Stimulants: very low</p>	

CRITERIA, QUESTIONS		JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
	about the quality of evidence or certainty in estimates of effects	<input type="checkbox"/> No included studies		
Values	<p>Is there important uncertainty about or variability in how much people value the main outcomes? The more likely it is that differences in values would lead to different decisions, the less likely it is that there will be a consensus that an option is a priority (or the more important it is likely to be to obtain evidence of the values of those affected by the option). Values in this context refer to the relative importance of the outcomes of interest (how much people value each of those outcomes). These values are sometimes called “utility values”.</p>			
	<ul style="list-style-type: none"> • Is there important uncertainty about how much people value each of the main outcomes? • Is there important variability in how much people value each of the main outcomes? 	<input type="checkbox"/> Important uncertainty or variability <input checked="" type="checkbox"/> Possibly important uncertainty or variability <input type="checkbox"/> Probably no important uncertainty or variability <input type="checkbox"/> No important uncertainty or variability		
Balance of effects	<p>Does the balance between desirable and undesirable effects favour the intervention or the comparison? The larger the desirable effects in relation to the undesirable effects, taking into account the values of those affected (i.e. the relative value they attach to the desirable and undesirable outcomes) the more likely it is that an option should be recommended.</p>			
	<ul style="list-style-type: none"> • Judgements regarding each of the four preceding criteria • To what extent do the following considerations influence the balance between the desirable and undesirable effects: <ul style="list-style-type: none"> - How much less people value outcomes that are in the future compared to outcomes that occur now (their discount rates)? - People’s attitudes towards undesirable effects (how risk averse they are)? - People’s attitudes towards desirable effects (how risk seeking they are)? 	<input type="checkbox"/> Favours the comparison <input type="checkbox"/> Probably favours the comparison <input type="checkbox"/> Does not favour either the intervention or the comparison <input checked="" type="checkbox"/> Probably favours the intervention <input type="checkbox"/> Favours the intervention	Integrating the provision of brief interventions into primary care provides many advantages, including more holistic health care, increased accessibility of mental health services for people in need of care, opportunities for reducing the stigma of mental health problems and reduced costs.	

CRITERIA, QUESTIONS		JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
		<input type="checkbox"/> Varies <input type="checkbox"/> Don't know		
Resources required	How large are the resource requirements (costs)? The greater the cost, the less likely it is that an option should be a priority. Conversely, the greater the savings, the more likely it is that an option should be a priority.			
	<ul style="list-style-type: none"> • How large is the difference in each item of resource use for which <u>fewer</u> resources are required? • How large is the difference in each item of resource use for which <u>more</u> resources are required? • How large an investment of resources would the option require or save? 	<input type="checkbox"/> Large costs <input type="checkbox"/> Moderate costs <input type="checkbox"/> Negligible costs and savings <input type="checkbox"/> Moderate savings <input type="checkbox"/> Large savings <input type="checkbox"/> Varies <input checked="" type="checkbox"/> Don't know		
Certainty of evidence of required resources	What is the certainty of the evidence of resource requirements (costs)?			
	<ul style="list-style-type: none"> • Have all-important items of resource use that may differ between the options being considered been identified? • How certain is the evidence of differences in resource use between the options being considered (see GRADE guidance regarding detailed judgements about the quality of evidence or certainty in estimates)? • How certain is the cost of the items of resource use that differ between the options being considered? • Is there important variability in the cost of the items of resource use that differ between the options being considered? 	<input type="checkbox"/> Very low <input type="checkbox"/> Low <input type="checkbox"/> Moderate <input type="checkbox"/> High <input checked="" type="checkbox"/> No included studies		
Cost effectiveness	Does the cost-effectiveness of the intervention favour the intervention or the comparison? The greater the cost per unit of benefit, the less likely it is that an option should be a priority.			
	<ul style="list-style-type: none"> • Judgements regarding each of the six preceding criteria • Is the cost effectiveness ratio sensitive to one-way sensitivity analyses? • Is the cost effectiveness ratio sensitive to multivariable sensitivity analysis? • Is the economic evaluation on which the cost 	<input type="checkbox"/> Favours the comparison <input type="checkbox"/> Probably favours the comparison <input type="checkbox"/> Does not favour	No reviews examining cost effectiveness identified	

CRITERIA, QUESTIONS		JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
	<p>effectiveness estimate is based reliable?</p> <ul style="list-style-type: none"> • Is the economic evaluation on which the cost effectiveness estimate is based applicable to the setting(s) of interest? 	<p>either the intervention or the comparison</p> <p><input type="checkbox"/> Probably favours the intervention</p> <p><input type="checkbox"/> Favours the intervention</p> <p><input type="checkbox"/> Varies</p> <p><input checked="" type="checkbox"/> No included studies</p>		
Health equity, equality and non-discrimination	<p>What would be the impact on health equity, equality and non-discrimination? (WHO INTEGRATE)</p> <p>Health equity and equality reflect a concerted and sustained effort to improve health for individuals across all populations, and to reduce avoidable systematic differences in how health and its determinants are distributed. Equality is linked to the legal principle of non-discrimination, which is designed to ensure that individuals or population groups do not experience discrimination on the basis of their sex, age, ethnicity, culture or language, sexual orientation or gender identity, disability status, education, socioeconomic status, place of residence or any other characteristics. All recommendations should be in accordance with universal human rights standards and principles. The greater the likelihood that the intervention increases health equity and/or equality and that it reduces discrimination against any particular group, the greater the likelihood of a general recommendation in favour of this intervention.</p>			
	<ul style="list-style-type: none"> • How are the condition and its determinants distributed across different population groups? Is the intervention likely to reduce or increase existing health inequalities and/or health inequities? Does the intervention prioritize and/or aid those furthest behind? • How are the benefits and harms of the intervention distributed across the population? Who carries the burden (e.g. all), who benefits (e.g. a very small sub-group)? • How affordable is the intervention for individuals, workplaces or communities? • How accessible - in terms of physical as well as informational access - is the intervention across different population groups? • Is there any suitable alternative to addressing the condition, does the intervention represent the only available option? Is this option proportionate to the need, and will it be subject to periodic review? 	<p><input type="checkbox"/> Reduced</p> <p><input type="checkbox"/> Probably reduced</p> <p><input type="checkbox"/> Probably no impact</p> <p><input type="checkbox"/> Probably increased</p> <p><input type="checkbox"/> Increased</p> <p><input type="checkbox"/> Varies</p> <p><input checked="" type="checkbox"/> Don't know</p>		

CRITERIA, QUESTIONS		JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
Feasibility	<p>Is the intervention feasible to implement?</p> <p>The less feasible (capable of being accomplished or brought about) an option is, the less likely it is that it should be recommended (i.e. the more barriers there are that would be difficult to overcome).</p>			
	<ul style="list-style-type: none"> • Can the option be accomplished or brought about? • Is the intervention or option sustainable? • Are there important barriers that are likely to limit the feasibility of implementing the intervention (option) or require consideration when implementing it? 	<input type="checkbox"/> No <input type="checkbox"/> Probably no <input checked="" type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/> Don't know		
Human rights and sociocultural acceptability	<p>Is the intervention aligned with human rights principles and socioculturally acceptable? (WHO INTEGRATE)</p> <p>This criterion encompasses two distinct constructs: The first refers to an intervention's compliance with universal human rights standards and other considerations laid out in international human rights law beyond the right to health (as the right to health provides the basis of other criteria and sub-criteria in this framework). The second, sociocultural acceptability, is highly time-specific and context-specific and reflects the extent to which those implementing or benefiting from an intervention as well as other relevant stakeholder groups consider it to be appropriate, based on anticipated or experienced cognitive and emotional responses to the intervention. The greater the sociocultural acceptability of an intervention to all or most relevant stakeholders, the greater the likelihood of a general recommendation in favour of this intervention.</p>			
	<ul style="list-style-type: none"> • Is the intervention in accordance with universal human rights standards and principles? • Is the intervention socioculturally acceptable to patients/beneficiaries as well as to those implementing it? To which extent do patients/beneficiaries value different non-health outcomes? • Is the intervention socioculturally acceptable to the public and other relevant stakeholder groups? Is the intervention sensitive to sex, age, ethnicity, culture or language, sexual orientation or gender identity, disability status, education, socioeconomic status, place of residence or any other relevant characteristics? • How does the intervention affect an individual's, population group's or organization's autonomy, i.e. their ability to make a competent, informed and voluntary decision? • How intrusive is the intervention, ranging from low 	<input type="checkbox"/> No <input type="checkbox"/> Probably no <input checked="" type="checkbox"/> Probably yes <input type="checkbox"/> Yes <input type="checkbox"/> Varies <input type="checkbox"/> Don't know		

CRITERIA, QUESTIONS		JUDGEMENT	RESEARCH EVIDENCE	ADDITIONAL CONSIDERATIONS
	intrusiveness (e.g. providing information) to intermediate intrusiveness (e.g. guiding choices) to high intrusiveness (e.g. restricting or eliminating choices)? Where applicable, are high intrusiveness and/or impacts on the privacy and dignity of concerned stakeholders justified?			

4.3. Summary of judgements

Table 6. Summary of judgements

Priority of the problem	- Don't know	- Varies		- No	- Probably No	✓ Probably Yes	- Yes
Desirable effects	- Don't know	- Varies		- Trivial	- Small	✓ Moderate	- Large
Undesirable effects	- Don't know	- Varies		- Large	- Moderate	- Small	- Trivial
Certainty of the evidence	- No included studies			✓ Very low	✓ Low	- Moderate	- High
Values				- Important uncertainty or variability	✓ Possibly important uncertainty or variability	- Probably no important uncertainty or variability	- No important uncertainty or variability
Balance of effects	- Don't know	- Varies	- Favours comparison	- Probably favours comparison	- Does not favour either	✓ Probably favours intervention	- Favours intervention
Resources required	✓ Don't know	- Varies	- Large costs	- Moderate costs	- Negligible costs or savings	- Moderate savings	- Large savings
Certainty of the evidence on required resources	✓ No included studies			- Very low	- Low	- Moderate	- High
Cost-effectiveness	✓ No included studies	- Varies	- Favours comparison	- Probably favours comparison	- Does not favour either	- Probably favours intervention	- Favours intervention
Equity, equality and non-discrimination	✓ Don't know	- Varies	- Reduced	Probably reduced	- Probably no impact	- Probably increased	- Increased
Feasibility	- Don't know	- Varies		- No	- Probably No	✓ Probably Yes	- Yes
Human rights and sociocultural acceptability	- Don't know	- Varies		- No	- Probably No	✓ Probably Yes	- Yes

✓ Indicates category selected, -Indicates category not selected

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Appendix I: mhGAP process note

Appraise quality of systematic review: Use the AMSTAR-2 quality appraisal tool to assess the quality of the identified systematic review(s)

<https://amstar.ca/docs/AMSTAR-2.pdf>.

Chou et al., 2022, is a Critically Low quality review

AMSTAR Criteria	Chou et al., 2022
1. Did the research questions and inclusion criteria for the review include the components of PICO?	Yes
2. Did the report of the review contain an explicit statement that the review methods were established prior to the conduct of the review and did the report justify any significant deviations from the protocol?	Partial Yes
3. Did the review authors explain their selection of the study designs for inclusion in the review?	Yes
4. Did the review authors use a comprehensive literature search strategy?	Yes
5. Did the review authors perform study selection in duplicate?	Yes
6. Did the review authors perform data extraction in duplicate?	No
7. Did the review authors provide a list of excluded studies and justify the exclusions?	Yes
8. Did the review authors describe the included studies in adequate detail?	Yes
9. Did the review authors use a satisfactory technique for assessing the risk of bias (RoB) in individual studies that were included in the review? /RCT	No
NRSI	
10. Did the review authors report on the sources of funding for the studies included in the review?	Yes
11. If meta-analysis was performed did the review authors use appropriate methods for statistical combination of results? RCT	0
NRSI	0
12. If meta-analysis was performed, did the review authors assess the potential impact of RoB in individual studies on the results of the meta-analysis or other evidence synthesis?	0
13. Did the review authors account for RoB in individual studies when interpreting/ discussing the results of the review?	No

14. Did the review authors provide a satisfactory explanation for, and discussion of, any heterogeneity observed in the results of the review?	Yes
15. If they performed quantitative synthesis did the review authors carry out an adequate investigation of publication bias (small study bias) and discuss its likely impact on the results of the review?	0
16. Did the review authors report any potential sources of conflict of interest, including any funding they received for conducting the review?	Yes

Appendix II: Search terms used to identify systematic reviews

(cannabis use OR marijuana use OR stimulant use OR cocaine use OR amphetamine use OR crack use OR drug use OR drug harm OR harm OR drug dependence OR dependence OR cannabis dependence OR marijuana dependence OR stimulant dependence or cocaine dependence OR crack dependence OR amphetamine dependence) AND (brief psychosocial OR brief psychosocial intervention)