IUD INSTITUT UNIVERSITAIRE SUR LES DÉPENDANCES

Treatment of Cannabis Use Disorder: Critical Assessment and Outlooks

Karine Bertrand, PhD, Professor
Marianne Saint-Jacques, PhD, Professor
Substance Abuse Studies and Research Programs
Université de Sherbrooke (Longueuil Campus)
https://www.usherbrooke.ca/toxicomanie/

RISQ Annual Seminar and Douglas Institute Cross-Training
UQTR – June 7, 2018

Presentation plan

- Background
- Case scenario: Caroline
- Reaching cannabis users: how?
  - Detection and brief interventions
  - Illustration
- Psychosocial approaches
  - Best practices
  - Illustration
- Looking to the future
  - Long-term recovery
  - New technologies
  - Illustration

Background

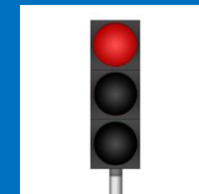
Addiction and service pathways: complex and varied

- Repetitive use of services in a chronic context
- 1st use of services: several years after the onset of problematic use

COMPLEX NEEDS
- Concurrent mental disorders
- Risk-taking
- Social insecurity

Cannabis Use Disorder (UD)

- **<u>AXIS 1 of the DSM-V</u>**
- **Impaired functioning or**
- **Clinically significant distress**



10% consult

Bertrand et al., 2014; Fischer et al., 2017; Health Canada, 2014.

Background (2)

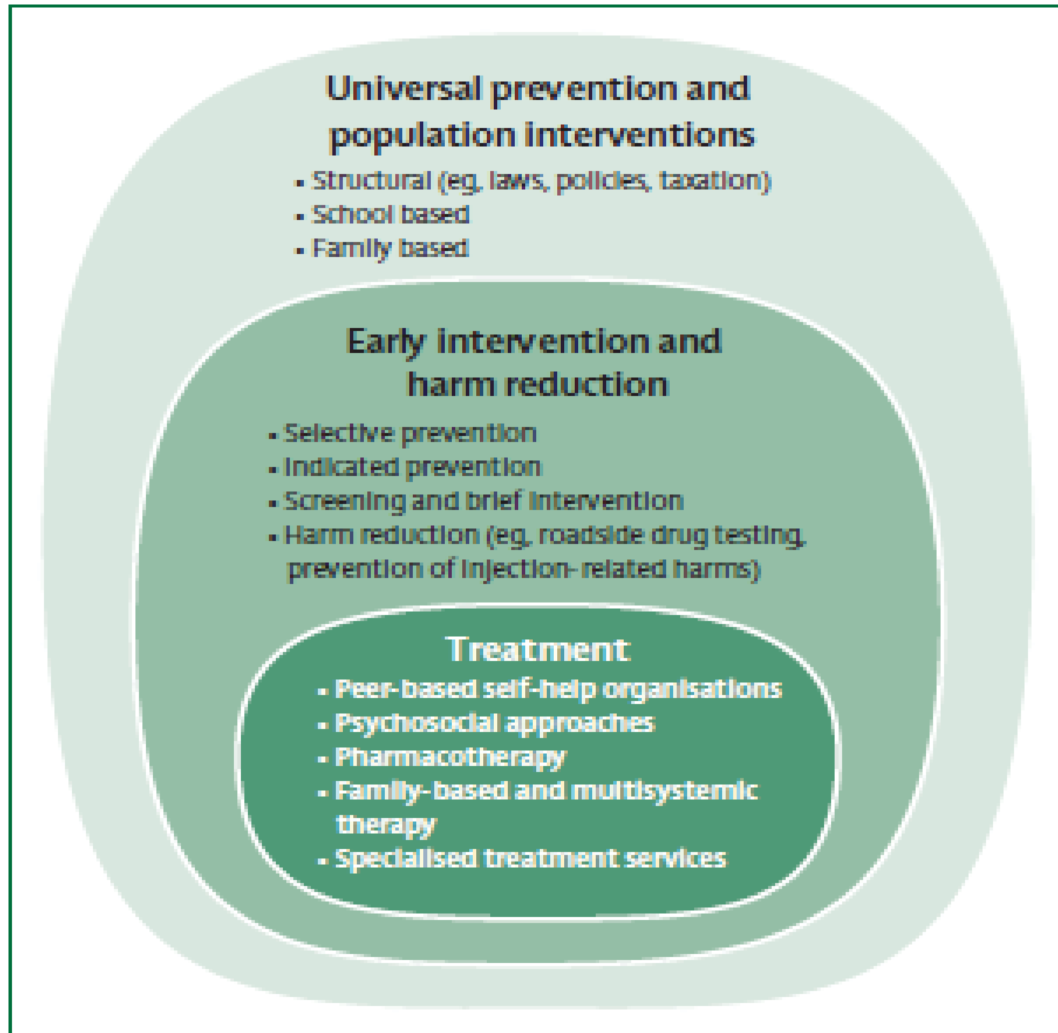


Figure: Spectrum of interventions used to address substance use in young people

Systemic Models of Care

Every door is the right one!
"No wrong door"

National Treatment Strategy Working Group (2008)

From (p. 282): Stockings, E.Hall, W.D., Lynskey, M. et al. (2016). Prevention, early intervention, harm reduction, and treatment of substance use in young people. *Lancet Psychiatry*, 3, 280–96.

Background (3)

- Cannabis UD: specific issues (Bertrand & St-Jacques, in press)
  - Distinct consumption profiles
    - Initiation typically during adolescence
    - Potentiated respiratory and cardiovascular health risks: tobacco and alcohol
    - Interaction with various distress symptoms such as anxiety and depression
    - Driving under the influence of cannabis: concerns
  - Legalization context
    - Lever to promote access to services?
    - Be careful not to create new silos.

Case scenario: Caroline, 15 years old

Family meeting with the school:

- Caught using at school
- Falling grades
- Wishes to drop out of school
- Recent romantic breakup
- Social anxiety
- Insomnia
- Suicidal thoughts since her breakup
- Cannabis helps her to sleep, to forget her troubles and to break the isolation at school.
- Daily cannabis use, plus alcohol on weekends

The problem is that I have my mom and the principal on my back. They won't leave me alone. If I didn't smoke, I'd feel much worse. At least I can sleep at night and have some fun with my friends who use at school. Otherwise, my life is just crap. I don't have real friends, I'm failing all my classes and I annoy everyone. If I would just disappear, it would be simpler!

Reaching cannabis users who have a cannabis UD: how?

The “No Wrong Door” principle: based on a range of gateways to services for substance abuse

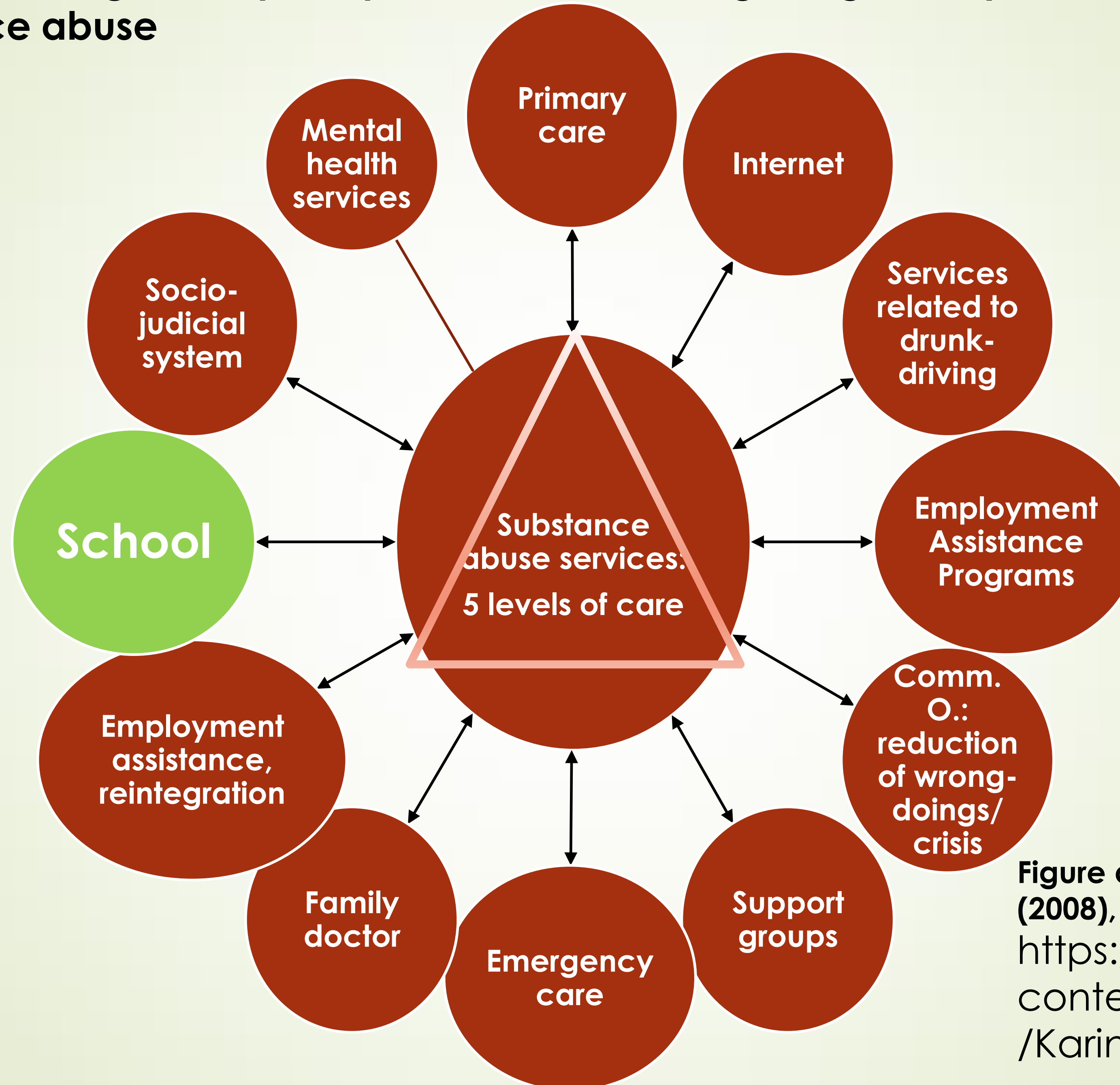


Figure adapted from Babor et al. (2008), by Bertrand (2016)
https://aidq.org/wp-content/uploads/2016/09/Karine-Bertrand.pdf

Screening and Brief Intervention

SBIRT: *Screening, Brief Intervention and Referral to Treatment*

- Intended for professionals who are **not specialized in addictology**

- Reaching at-risk **and problem** users
  - Intervene by mobilizing resources
  - Self-change approach

- Effective in reducing use and its risks
  - Yellow lights: users at risk of developing cannabis UD
  - Red lights?

Babor et al., 2017; Fischer et al., 2017; Saint-Jacques et al., 2009.

Identifying Problem Cannabis Users

- Screen and detect
  - Quick tools; free; easy to interpret
- Screening tools (1-6 questions)
  - Cannabis Abuse Screening Test (CAST; Legleye et al., 2007);
  - ADOSPA/CRAFFT (Knight et al., 1999) and *NIDA-Quick Screen* (Smith et al., 2010)
- Detection tools
  - *Cannabis Problems Questionnaire for Adolescents* (CPQ-A; Martin, Copeland et al., 2006)
  - DEP-ADO (Landry et al., 2004) and DÉBA alcohol-drugs (Tremblay et al., 2009)

Brief intervention

- Very brief interventions (5 to 40 mins)
  - Duration: 1-4 meetings
  - Differs from brief therapies
- Essential ingredients
  - Personalized feedback and advice
- Aim to incite change and treatment initiation
- Prioritization of intervention goals

  Priority needs and client preferences
- Treatment referral
  - Support, case follow-up and involvement in referral by practitioners

Brief 'FRAMES' type intervention
Personalized FEEDBACK:
  - Situate the patient in relation to his drug use and risks
- RESPONSIBILITY:
  - Tell patient that he alone can decide to change and make choices about his use
- Professional OPINION
  - Clear and specific
  - On the impacts of his drug use and his reduction goals
- LIST of options:
  - Cut down or quit
  - Choice of various strategies
- EMPATHY
  - Warmth, OQ, reflections, summaries, etc.
- SENSE of personal efficiency
  - Bring up past strengths and successes

Illustration: Caroline, 15 years old

DETECTION (*Screening*)
-PAS & Cannabis tools
-Suicide risk

BRIEF INTERVENTION:
- *Feedback: ask/provide/ask*
  - *Cast doubt*

-GUIDANCE AND SUPPORT
-The chain of trust
-Importance of choice, taking into account the pace, preferences, needs

I use like everyone else, don't I? Well, I'm not talking about the glass-wearing geeks, of course...

Before, I used to just take drugs once in a while; I used to hang out with my cousin, we would go skiing-he's pretty cool, but he doesn't take drugs.

I stopped for 2 months by myself once; it calmed my mother down a little. We didn't fight as much then.

I got scared last Saturday; I had been drinking a lot and smoked some pot. I was depressed. I thought about just throwing myself off the balcony. I don't really want to die, you know.

Psychosocial approaches

Promising and effective treatment models

General principles

- Offering treatment is more effective than doing nothing
- Greater intensity leads to greater efficiency
  - More than 4 meetings, more than a month
  - More effective than brief interventions or placebo
- Combination of more than one approach
- Adolescents
  - Insufficient research, but promising models

Babor & MTPRG, 2004; Gates et al., 2017; Tremblay et al., 2010.

Effective treatments

- *Motivational Enhancement Therapy* (MET) (Miller & Rollnick, 2013)
  - Brief structured intervention
  - Duration: 2 to 4 meetings
  - Components/targets of treatment:
    - Personalized feedback on consumption score; resolve ambivalence about abstinence or reduction; make a plan for change
  - Differs from MI
  - As effective as CBT

(Babor & MTPRG, 2004); Gates et al., (2017)

Effective treatments

- Cognitive Behaviour Therapy (CBT)
  - Supports: social learning theories and cognitive theories
  - Duration: 3 CBT sessions + 2 METs up to 12 CBT sessions
  - Components:
    - Functional analysis
    - Skills development to support behaviour change
    - Modification of erroneous thoughts and beliefs
  - High level of evidence for efficacy in adults with cannabis UD

Babor & MTPRG, 2004; Gates et al., 2017.

Effective treatments

- Contingency Management Approach or CM
  - In combination with other treatment models
  - Reinforcing (monetary) a target behaviour, such as abstinence
    - Negative urine test or attendance at therapy sessions
    - Intensity of reinforcements increases gradually to increase efficiency

Babor & MTPRG, 2004; Gates et al., 2017.

Effective treatments

Adolescents

- *Cannabis Youth Treatment Study* (Dennis et al., 2004)
  - CBT/MET vs.
  - CBT/MET in 5 sessions + 6 parent meetings (Family Support Network) vs.
  - Adolescent Community Reinforcement Approach vs.
  - Multidimensional family therapy
- Contingency approach
  - Very few studies
  - The model needs to be adapted: supporting skills development related to consumption reduction

Drug Alcohol Rev. Apr 2018; 37 Suppl 1:S246-S262. doi: 10.1111/dar.12590. Epub Aug 14, 2017.

Dennis et al., 2004

- ✓ Evidence on integrated treatment: insufficient + rare in adolescents
  - Post-traumatic stress syndrome
  - Conduct disorder
  - Major depression
  - ADHD
- ✓ But, significant progress documented
  - Substance abuse AND concurrent disorders
- ✓ Similarities in treatment:
  - Manualized treatment
  - Cognitive-behavioural component
  - Clear treatment targets that address substance use AND the concurrent disorder
  - **Training and supervision of clinicians**
- ✓ Seeking Safety = only one that shows superiority
  - ... only one compared to a standard treatment, which is not bona fide

Rx
“Bona Fide”
(Tremblay et coll., 2010)

Auteurs	Population	Intervention et comparateur	Contexte (setting)	Résultats (outcomes)
Azrin et al. 2001	-Double diagnostic :trouble lié aux substances (TS) et trouble de la conduite -n= 56 au total -46 gars /10 filles -12-17 ans	-Thérapie comportementale familiale (n=29) - Thérapie individuelles axée sur la résolution de conflits (n=27) -2 groupes : 15 sessions/6 mois	-Références à la recherche : Centre de détention, juge, agent de probation, école -Thérapeutes : étudiants en psychologie supervisés -Suivis :pré-post-six mois	-Principaux indicateurs : consommation de substances et problèmes de conduite -Plusieurs autres indicateurs mesurés -Les deux groupes sont équivalents : s'améliorent sur tous les indicateurs
Najavits et al. 2006 ★	-Double diagnostic : Syndrome de stress post-traumatique et TS -n=33 -Toutes des adolescentes -16 ans en moyenne	-Seeking safety (SS) + Traitement habituel (TH) (n=18) -TH seul (n=15) SS : 25 sessions/3mois TH : durée et type variables	- SS offert dans un contexte de recherche standardisé -Recrutement par l'équipe de recherche via des affiches, visite dans les cliniques, etc. -Suivis pré-post-3mois	-Le groupe SS s'améliore davantage que le groupe de comparaison sur des indicateurs d'abus de substances et de trauma + sur d'autres dimensions
Riggs et al. 2007	-Double diagnostic : dépression majeure et TS -n =126 -85 hommes/ 41 femmes -Âge : 13-19 ans	-CBT (thérapie cognitive-comportementale) + fluoxetine (n=63) -CBT + placebo (n=63) -Durée de 16 semaines pour les 2 groupes	- Recrutement dans la population générale et auprès de services sociaux et de justice juvénile -CBT et fluoxetine offerts dans un contexte de recherche standardisé -0, 4, 8, 12 et 16 semaines	-CBT + fluoxetine : amélioration plus marquée que groupe de comparaison sur l'un des deux indicateurs de dépression -2 groupes s'améliorent sur divers indicateurs de TS et de troubles de conduite, de façon équivalente
Thurnstone et al. 2010	Double diagnostic : TS et TDAH (trouble de déficit de l'attention avec hyperactivité) -n =70 -15 filles/55 gars -13 à 19 ans	-EM (entretien motivationnel) + CBT +atomoxetine -EM+CBT+ placebo -Durée : 12 semaines/sessions pour les 2 groupes qualité adéquats pour les deux groupes	-Traitements offerts dans un contexte de recherche standardisé -Stratégies de recrutement non décrites -Suivis 0, 4, 8, 12 semaines	-2 groupes s'améliorent sur les indicateurs de TDAH et de TS

Bertrand, L'Espérance, Flores-Aranda et al., 2014.

Illustration: Caroline, 15 years old

Committing to specialized follow-up

I'm willing to meet once with a counsellor from this centre to calm things down.

Maybe I could avoid using at school so the principal wouldn't be on my case so much.

Mixing alcohol with pot makes me really depressed; I should stop after 2 beers, otherwise my dark thoughts take over.

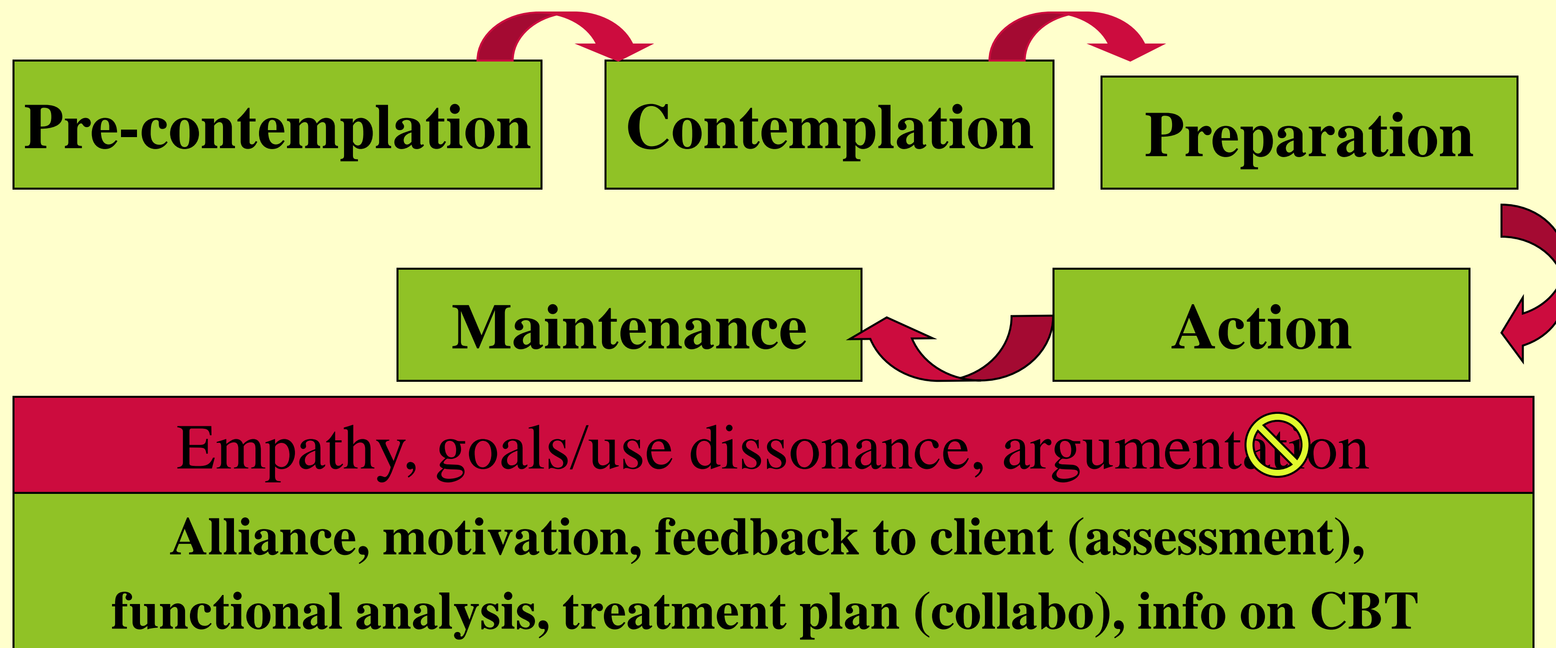
I have plans; I want to work in horticulture. I just need to get out of school to finally start working.

It would do me good to confide in a friend; I have isolated myself since my boyfriend left me...

The CYT Protocols: MET/CBT5
(“Motivational Enhancement Therapy”/“Cognitive Behavioural Therapy”)

- **Motivational** and **cognitive behavioural** therapy (5 sessions)

A) Two individual sessions: motivational therapy



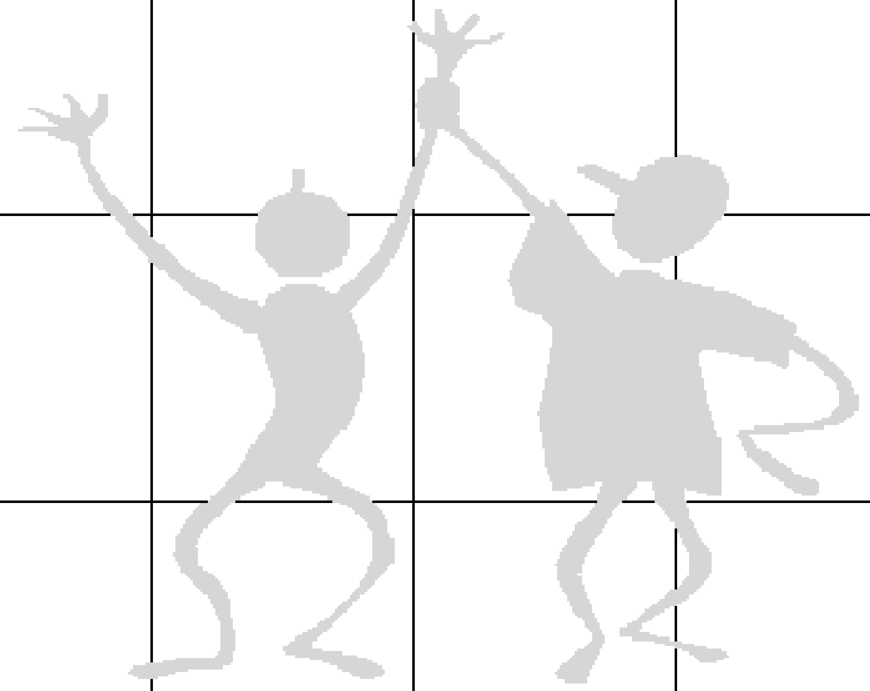
http://store.samhsa.gov/shin/content//SMA05-4010/SMA05-4010.pdf

ÉCHELLE D'ATTEINTE DE BUTS

Élaboration des buts Date :____________________

Entrevue de suivi : Date :____________________

Niveau d'atteinte des buts	Oupsss! Que se passe-t-il???	Continue, tu es sur la bonne voie	SUCCÈS!!!	Félicitation, tu te dépasses	Exceptionnel!	
BUT 1						Commentaires
BUT 2						Commentaires
BUT 3						Commentaires



http://elearning.canchild.ca/dcd_pt_workshop/assets/planning-interventions-goals/goal-attainment-scaling.pdf

The CYT protocols: MET/CBT5

B) Three group sessions*: cognitive behavioural

FIVE GOALS (three sessions)

1) **Skills to refuse** the psychotropic drug offered
2) **Plan for pleasant activities** (without psychotropic drugs)
3) **Social network** that supports remission
4) **Management of high-risk situations**
5) **Relapse management**

The CYT protocols: MET/CBT12

- Addition of seven group sessions* to CBT5

SEVEN GOALS
1) Problem solving skills
2) Anger awareness
3) Anger management
4) Effective communication skills
5) Coping with cravings
6) Management of distress/depression
7) Recognizing cognitive distortions associated with relapses

http://store.samhsa.gov/shin/content//SMA08-3954/SMA08-3954.pdf

Looking to the future
Long-term recovery
New technologies
Illustration

Substance Abuse Treatment Models in the Context of Chronicity: What are they and are they Effective?

- ✓ Some findings from our recent systematic review (Simoneau et al., 2018) 16 studies (15= US)
- 4 model categories
  - **1: Brief assessments and feedback, at intervals (quarterly), over the long term (2-4 years)**
  - 2: Continuing care, on a regular basis, largely by telephone (3 months - 2 years)
  - 3: Continuing care, on a regular basis, face-to-face, concurrent disorders (2-10 months)
  - 4: Intensive follow-up, multiple components, concurrent disorders (unlimited))
- Diversity of models; no evidence, despite some promising results

Substance Abuse Treatment Models in the Context of Chronicity: What are they and are they Effective?

- Some findings from our recent systematic review (Simoneau et al., submitted)
  - **1: Brief assessments and feedback, at intervals (quarterly), over the long term (2-4 years)** (2 studies)

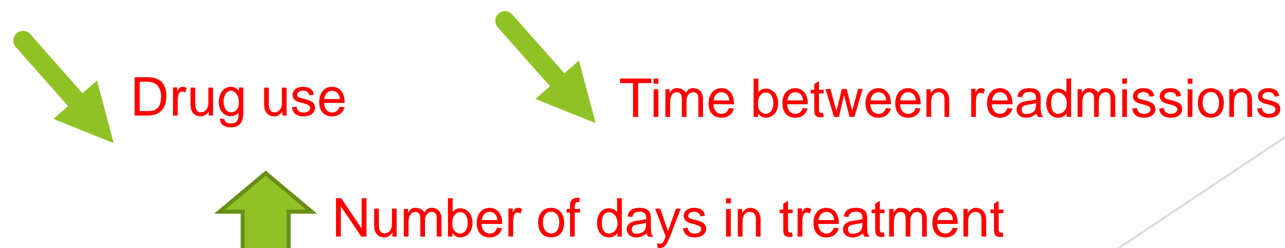
Scott CK, Foss MA, Dennis ML. Pathways in the relapse--treatment--recovery cycle over 3 years. J Subst Abuse Treat 2005; 28 Suppl 1: S63-72.

Scott CK, Dennis ML. Results from two randomized clinical trials evaluating the impact of quarterly recovery management checkups with adult chronic substance users. Addiction 2009; 104(6):959-71.

Substance abuse treatment models in the context of chronicity: What are they and are they effective?

- ✓ Some findings from our recent systematic review (Simoneau et al., 2018)
  - ➢ **1: Brief assessments and feedback, at intervals (quarterly), over the long term (2-4 years)**

A) Monitoring
B) Feedback
C) Motivational interviewing
D) Resolving treatment barriers
E) Engagement and retention protocols



Interventions integrating information and communication technologies (I-ICT)

Tested models

- Brief interventions and therapies
- Online or on computer
- Administered in self-treatment mode and automated
- Adaptation of evidence-based treatment models

Innovative approaches capitalizing on mobile applications

  - Geo-tracking
  - *Momentary ecological assessment/intervention*

Bertrand & Saint-Jacques, 2018; Hoch et al., 2016.

I-ICTs and treatment of cannabis UD

- Efficiency
  - Small sizes of effect in favour of I-ICTs vs doing nothing
  - Face to face?
  - Users NOT in the process of change
    - Similar to users in treatment, but with fewer adverse consequences
  - Reduction in frequency of use and number of diagnostic criteria
- Seems most effective if interaction with a counsellor (chat or remote feedback)

Hoch et al., 2016

I-ICTs

- Benefits
  - Reaching problematic users who are not in the process of changing or requesting help
  - Fostering access to treatment
    - Remote areas
    - Hidden populations
    - Reducing stigma through anonymity
    - Flexibility over time
  - 24/7 virtual peer group support

Bertrand & Saint-Jacques, 2018

I-ICTs

- Limitations
  - Variable quality of applications and sites
  - Confidentiality
  - Evolving technology and costly to develop
  - Risk of attempting to replace existing or needed services

Bertrand & Saint-Jacques, 2018

Illustration: Caroline, 15 years old

Uses an internet search engine: Cannabis application

https://www.stop-cannabis.ch/les-app-gratuites-stop-cannabis-ch-pour-iphone-android

Receives a call from her follow-up counsellor, as agreed, 3 months after the last telephone contact.

Resumes some meetings with him.

Accepts the suggestion to use the services of Carrefour Jeunesse Emploi.

Invests herself in a DVS-horticulture program.

To conclude: What you need to remember

- ✓ Cannabis UD, depending on the individual, may be a transient or chronic disorder
- ✓ Importance of adapting our interventions and services for people with long-term assistance needs
  - "No wrong door": facilitating access and continuity
  - Long-term treatment planning: follow-up, reassessment of needs and support/referral as needed
  - Readmission: from a criterion of failure to a criterion of therapeutic success
  - The relationship: continuous efforts over time that need to be proactive
  - Valuing capabilities vs. focusing on gaps
  - Commitment and persistence in treatment: priority targets

To conclude: What you need to remember

- ✓ Cannabis UD typically emerges in adolescence; it is important to intervene early
  - ✓ Without waiting for a clear request for help
  - ✓ Need for outreach work
  - ✓ SBIRT as an important link in the *chain of trust*
- ✓ ICTs: promising both for reaching cannabis users who have never used services and for encouraging commitment or recommitment to specialized follow-up

Thank you!

RISQ
Recherche et intervention
sur les substances psychoactives – Québec

IUD INSTITUT UNIVERSITAIRE SUR LES DÉPENDANCES

UNIVERSITÉ DE SHERBROOKE

SUGGESTED REFERENCES

Babor, T. F., & The Marijuana Treatment Project Research Group (MTPRG). (2004). Brief Treatments for Cannabis Dependence: Findings From a Randomized Multisite Trial. *Journal of Consulting and Clinical Psychology, 72*(3), 455-466. doi: http://dx.doi.org/10.1037/0022-006X.72.3.455

Babor, T. F., Del Boca, F., & Bray, J. W. (2017). Screening, Brief Intervention and Referral to Treatment: implications of SAMHSA's SBIRT initiative for substance abuse policy and practice. *Addiction, 112(Suppl 2)*, 110-117. doi: 10.1111/add.13675

Bertrand, K & Saint-Jacques, M. (2018; In press). Traitement de la consommation problématique de cannabis : bilan critique et perspectives. Dans Brochu, S. & Fallu, J-S. (Éds) *Cannabis*. Les Presses de l'Université de Montréal.

Bertrand, K., L'Espérance, N., Flores-Aranda, J. (2014). La méthode de la revue systématique dans le cadre du développement de guides de « meilleures pratiques » : illustration provenant du domaine de la toxicomanie et des troubles mentaux concomitants chez les adolescents. *In* Corbière, M. et Larivière, N., *Méthodes qualitatives et quantitatives appliquées au domaine de la santé mentale*. Québec : PUQ.

Bertrand, K., Flores-Aranda, J., Brunelle, N., Landry, M., Patenaude, C., Brochu, S. (2014). Les trajectoires d'utilisation de services en toxicomanie et les principaux enjeux associés: la perspective des usagers. Dans Brochu, S., Landry, M., **Bertrand, K.**, Brunelle, N., Patenaude, C. (Éds.) *À la croisée des chemins : trajectoires addictives et trajectoires de services. La perspective des personnes toxicomanes*. Québec : Presses de l'Université Laval.

Dennis, M. et al. (2004). The cannabis youth treatment (CYT) study: Main findings from two randomized trials. *Journal of Substance Abuse Treatment*, 27, 197–213.

SUGGESTED REFERENCES

Fisher et al. (2017). Lower-risk cannabis use guidelines: A comprehensive update of evidence and recommendations. *American Journal of Public Health, 107(8)*, e1-e12.

Gates, P. J., et al. (2017). Psychosocial interventions for cannabis use disorder. *Cochrane Database Systematic Reviews*, 5,. doi: 10.1002/14651858.CD005336.pub4

Health Canada. (2014 Canadian Alcohol and Drug Use Monitoring Survey: Summary of results. ESCCAD-2012. Accessed on September 15, 2017 at https://www.canada.ca/en/health-canada/services/health-concerns/drug-prevention-treatment/drug-alcohol-use-statistics/canadian-alcohol-drug-use-monitoring-survey-summary-results-2011.html

Hoch, E., et al. (2016). Digital interventions for problematic cannabis users in non-clinical settings: Findings from a systematic review and meta-analysis. *European Addiction Research*, 22(5), 233-242. doi: 10.1159/000445716

Miller, W.R. & Rollnick, S. (2013). L'entretien motivationnel. Aider la personne à engager le changement. 2e édition. Paris: InterEditions

National Treatment Strategy Working Group. (2008). *A systems approach to substance use in Canada: Recommendations for a national treatment strategy.* Ottawa: National Framework for Action to Reduce the Harms Associated with Alcohol and Other Drugs and Substances in Canada.

Saint-Jacques, M., et al. (2009). *Le profil de compétences des intervenants de première ligne pour la détection, l'intervention précoce et la référence auprès des clientèles aux prises avec des problèmes de dépendances*. Rapport remis au FRQSC. Montréal : Douglas, Institut universitaire en santé mentale.

SUGGESTED REFERENCES

Simoneau, H., Kamgang, E., Tremblay, J., Bertrand, K., Brochu, S., Fleury, M-J. (2018). Efficacy of the intervention models addressing the chronicity of substance use disorders: A systematic review. *Drug Alcohol Review.* Apr; 37 Suppl 1: S246-S262doi: 10.1111/dar.12590.

Tremblay, J., et al. (2010). Recension des écrits sur les meilleures pratiques en réadaptation chez les adultes toxicomanes. *Intervenir auprès des adultes et de leur entourage dans les centres de réadaptation pour personnes alcooliques et toxicomanes : pratiques gagnantes et offre de services de base*. Association des centres de réadaptation en dépendance du Québec (ACRDQ), Montréal, Canada.