# Motivational cognitive therapy protocol for cannabis use disorder in transitional age youth

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# Transitional age youth and their characteristics

- A period of life that spans from late adolescence to early adulthood, typically between 16 to 25.

- Experience a myriad of psychosocial transitions

Independence, identity formation, exploring sexuality and relationships, education, career development, behaviors that have potential for poor health outcomes

- Vulnerability to new-onset of mental health disorders.

# Transitional ages and their characteristics

- Vulnerability regarding sensitivity to neurotoxicity and the development of substance use disorders (SUD)
- Brain development continues well into the 20s; in reasoning, judgement, decision-making abilities, and impulse control.
- The development of executive function, continues until the age of 25.
- Extant evidence also points to considerable brain neuroplasticity, the ability of the brain to alter its structure in response to experience.

# The prevalence and trends of cannabis use

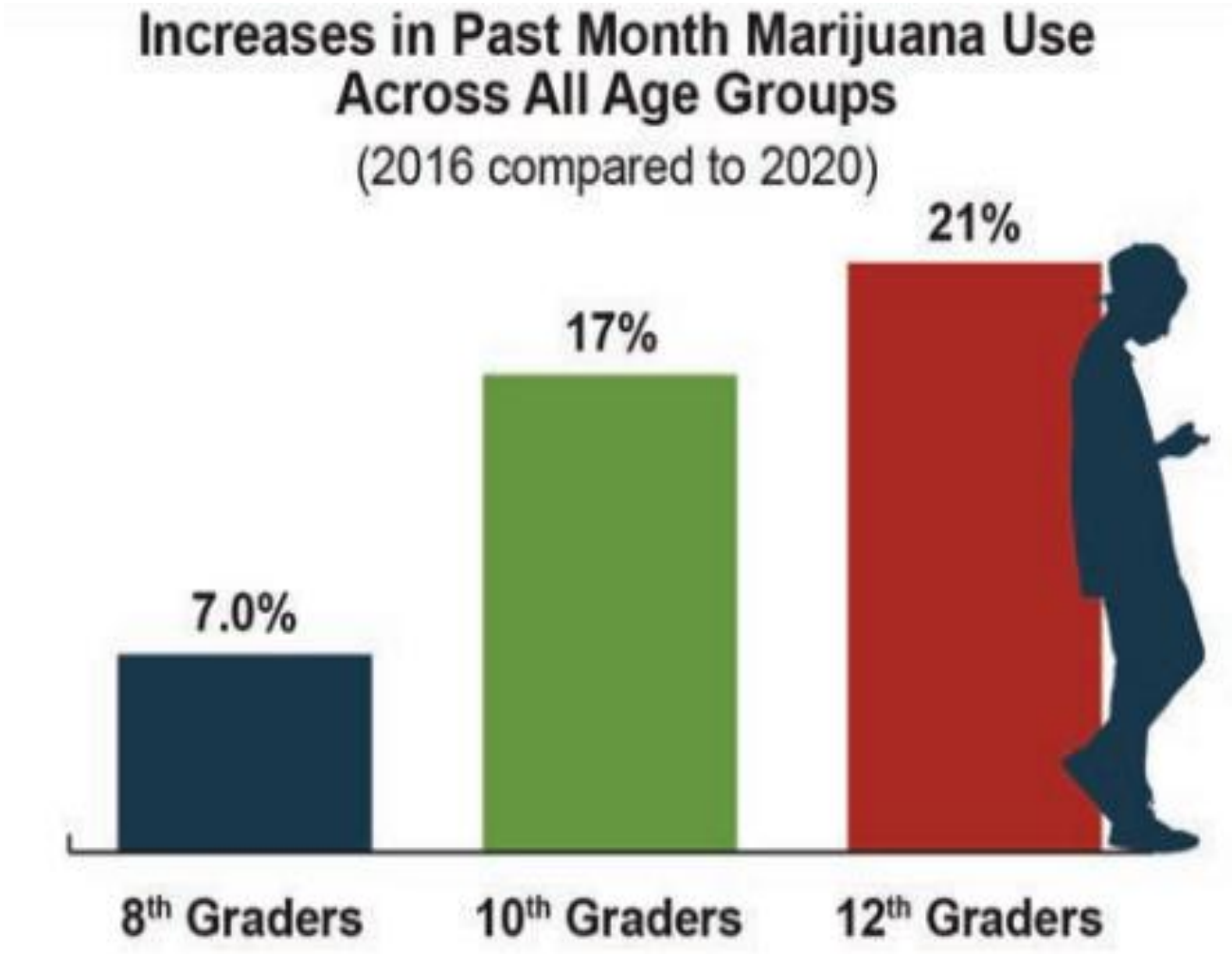
- Cannabis is still the most consumed illicit substance in the world.
- According to the UNODC report, around 284 million people aged 15-64 used drugs worldwide in 2020, a 26 percent increase over the previous decade.
- Young people are using more drugs.
- According to the 2021 global drug use report, despite this increasing trend, the percentage of teenagers who consider regular cannabis use to be harmful has decreased significantly.

# The prevalence and trends of cannabis use

- The available evidence shows that along with the emergence of the idea that the side effects and risks are negligible, drug use among teenagers has increased in the 90s.

- **30.7% of high school seniors used cannabis (marijuana) in the past year.**

Source: 2022 Monitoring the Future Survey


Increases in Past Month Marijuana Use
Across All Age Groups
(2016 compared to 2020)
7.0%
17%
21%
8th Graders
10th Graders
12th Graders

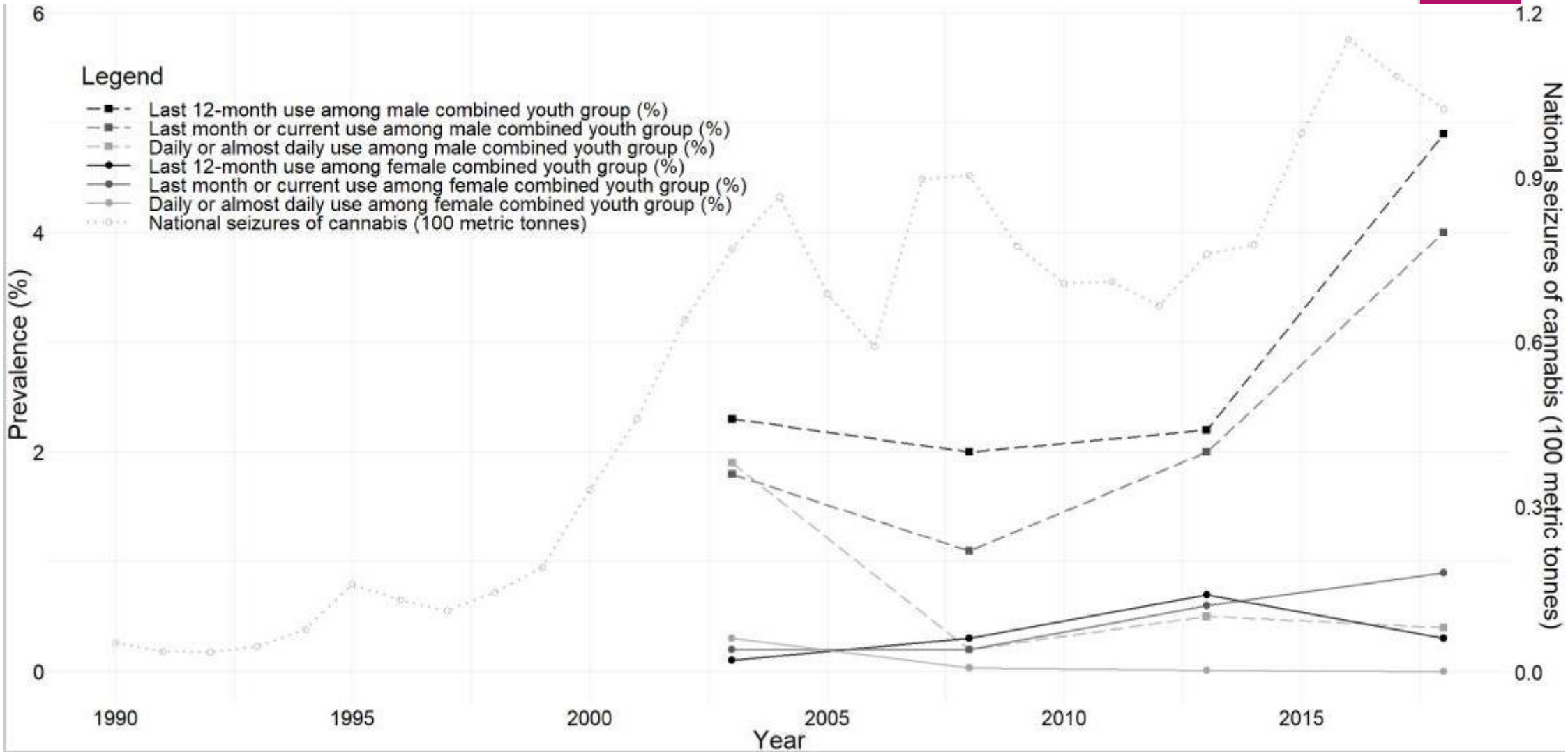
# Health outcomes of cannabis use in transitional ages

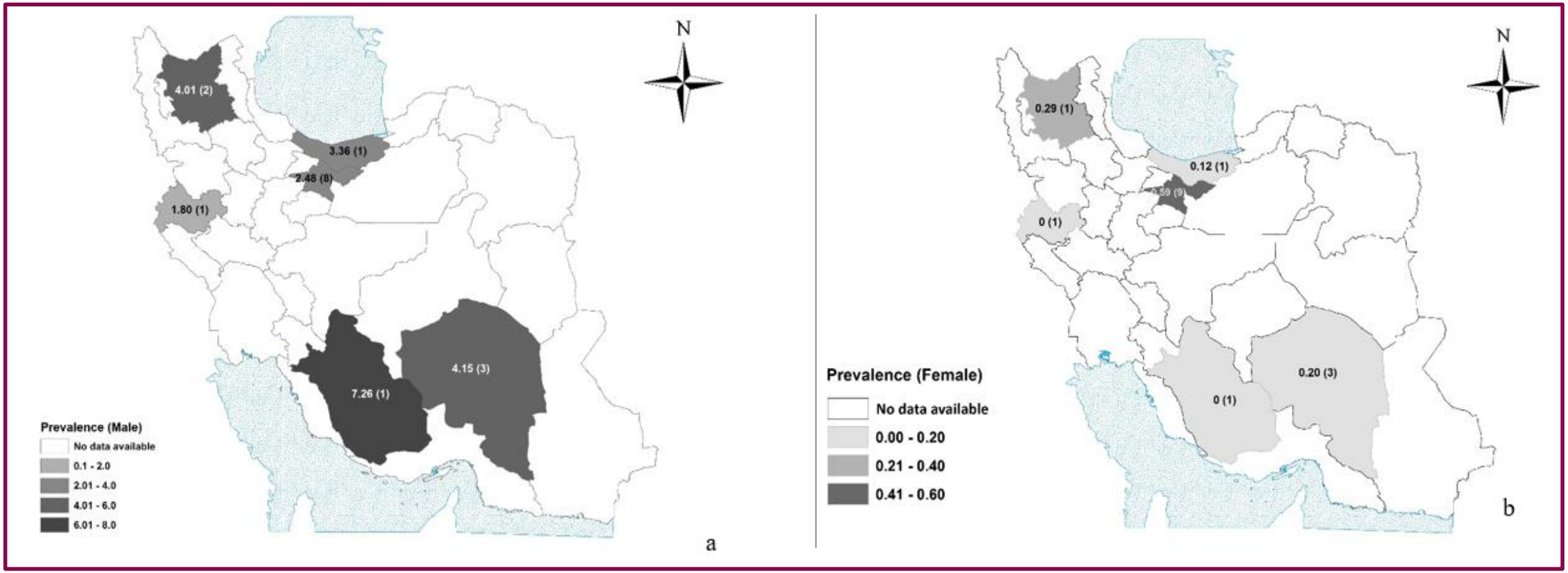
- Serious public health problems, accidents, mental and behavioral disorders and sexually transmitted diseases, since the 1990s
- More neurodevelopmental damages
- Triggering the occurrence of psychiatric diseases
- More likely to develop severe CUD than adults
- Greater psychotic-like symptoms than adults

- Cannabis may be considered as a “gateway drug”.

# Cannabis use prevalence in Iran

- The prevalence of cannabis use in Iran appears to be lower than the prevalence in many other countries.
- However, along with the increase in cannabis seizures, there is strong evidence of an increase in cannabis use among the youth.
- There is some evidence of an increase in “cannabis use disorder”


Legend
Last 12-month use among male combined youth group (%)
Last month or current use among male combined youth group (%)
Daily or almost daily use among male combined youth group (%)
Last 12-month use among female combined youth group (%)
Last month or current use among female combined youth group (%)
Daily or almost daily use among female combined youth group (%)
National seizures of cannabis (100 metric tonnes)
Prevalence (%)
National seizures of cannabis (100 metric tonnes)
Year
0
2
4
6
0.0
0.3
0.6
0.9
1.2
1990
1995
2000
2005
2010
2015


N
4.01 (2)
3.36 (1)
2.48 (8)
1.80 (1)
7.26 (1)
4.15 (3)
Prevalence (Male)
No data available
0.1 - 2.0
2.01 - 4.0
4.01 - 6.0
6.01 - 8.0
a
N
0.29 (1)
0.12 (1)
0 (1)
0.20 (3)
0 (1)
Prevalence (Female)
No data available
0.00 - 0.20
0.21 - 0.40
0.41 - 0.60
b

# Cannabis use disorder treatment in transitional age youth

- Treatment of cannabis use disorder is mainly behavioral and requires a patient-centered and multifaceted approach, with a focus on patient education.
- Drug treatment for this disorder is limited and experimental.
- Because adolescents are fundamentally different from adults, they often do not benefit from adult treatment approaches

# Cannabis use disorder treatment in transitional age youth

The reasons for the difference between adolescents and adults are:

- The developmental issues they are dealing with,
- The values and beliefs that they hold,
- Environmental considerations such as school climate and peer influences.

# Cannabis use disorder treatment in transitional age youth

- Since the late 90s, special treatment models for adolescents have been developed.
- These models fall into several categories :

- ✓ Behavior Therapy-Behavior Management/modification)
- ✓ Cognitive Behavior Therapy
- ✓ Motivational interviewing

# Cannabis use disorder treatment in transitional age youth

- An optimal treatment model should include the following characteristics:
- ✓ Comprehensiveness,
- ✓ effectiveness,
- ✓ accessibility,
- ✓ cost-effectiveness,
- ✓ and the ability to integrate with the continuum of child and adolescent services
- The **"cannabis youth treatment"** manual is a collection of 5 treatment models based on the described approaches and there is empirical evidence for them.

# CYT (Cannabis Youth Treatment)

- 1997
- The Center for Substance Abuse Treatment (CSAT) created the Cannabis Youth Treatment (CYT) cooperative agreement
- In response to:
  - the expanding population of **adolescent** cannabis users
  - the **lack of short term** (less than 3 months) outpatient treatment models targeting adolescents with cannabis-related problems .

# CYT (Cannabis Youth Treatment)

- Goals and objectives:
  - To test the relative effectiveness and cost-effectiveness of a variety of interventions targeted at reducing/eliminating marijuana use in **adolescents**
  - To provide validated models of these interventions to the treatment field.

# CYT (Cannabis Youth Treatment)

- Done at 4 sites, USA
- Target Population:
  - Adolescents between the ages of **12** and **18** with problems related to marijuana use
  - Not designed for treating adolescents with polysubstance dependence

# CYT (Cannabis Youth Treatment )

- Involved 5 manual-based, expert-supported treatment conditions:
  - **MET/CBT5**
  - **MET/CBT5+CBT7**
  - **FSN (**Family Support Network )
  - **ACRA (**Adolescent Community Reinforcement Approach)
  - **MDFT (**Multidimensional Family Therapy)

# CYT (Cannabis Youth Treatment )

- **MET/CBT5:**
  - 2 individual sessions of motivational enhancement therapy (MET)
  - 3 group sessions of cognitive behavioral therapy (CBT)

# CYT (Cannabis Youth Treatment )

- **MET/CBT5+CBT7 (MET/CBT12)**
  - MET/CBT5 treatment

    + 7 supplemental cognitive behavioral sessions covering additional coping skills topics

# CYT (Cannabis Youth Treatment )

- **FSN** (Family Support Network) (FSN)
  - MET5+CBT7 treatment
  - + additional support for families (home visits, parent education meetings, parent support group), aftercare, and case management.

# CYT (Cannabis Youth Treatment )

- **ACRA(**Adolescent Community Reinforcement Approach) :
  - 12 individual sessions with an adolescent and the adolescent's parent, caregiver, or concerned other.

# CYT (Cannabis Youth Treatment )

- **MDFT(**Multidimensional Family Therapy):
  - A family focused treatment
  - 12 weekly sessions to work individually with adolescents and their families.
  - Focuses on family roles, other problem areas, and their interactions.

# CYT (Cannabis Youth Treatment )

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- **MET/CBT5+CBT7**
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# MET/CBT5

**Rationale for Brief Treatment:**

- Previous studies:
  - a minimal intervention approach may be more cost-effective for a marijuana-abusing population than an extended group counseling approach.
- Cost-effectiveness in this study:
  - Trial 1: MET/CBT5 > MET/CBT12 > FSN
  - Trial 2: ACRA > MET/CBT5 > MDFT

# MET/CBT5

- 2 individual sessions of motivational enhancement therapy (**MET**)
- 3 group sessions of cognitive behavioral therapy (**CBT**).

# MET (Motivational Enhancement Therapy)

- Based on the premise that :

  **Clients will best be able to achieve change when motivation comes from within themselves, rather than being imposed by the therapist.**

- The primary element :

  Motivational interviewing

# MET (Motivational Enhancement Therapy)-Key Concept

- **Ambivalence**
- **Reflective listening**
- **Open-ended questions**

# MET (Motivational Enhancement Therapy)-Key Concepts

**Ambivalence:**

- Mixed feelings about change
- MET assumes that: ambivalence is **normal** and **expected**.
- Changing a problematic behavior → difficult and anxiety provoking, and often involves giving up enjoyable activities or relationships →generally feel that they do in part want to change and do not in part want to change
- Therapist's task?
  - help clients **acknowledge** and **discuss** these mixed feelings in a way that helps tip the balance **in favor of change**.

# MET (Motivational Enhancement Therapy)-Key Concepts

**Reflective Listening**:

- All the statements that express the therapist's understanding of what the client is saying.

- Try to keep the guess close to what the client has said

# MET (Motivational Enhancement Therapy)-Key Concepts

**Open-Ended Questions**:

- Invite an elaborative response
- Elicits more of the client's thoughts and feelings

# MET (Motivational Enhancement Therapy)

- Five Strategies:
  - 1. Express empathy and acceptance
  - 2. Develop discrepancy
  - 3. Avoid argumentation
  - 4. Roll with resistance
  - 5. Support self-efficacy.

# MET (Motivational Enhancement Therapy)

- Five Strategies:
  - 1. Express empathy and acceptance
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→

- Superior/inferior relationship X
- Confrontation X
- Impression of trying to convince clients of the error X
- **Listening rather than telling**

# MET (Motivational Enhancement Therapy)

- Five Strategies:
  - 1. Express empathy
  - 2. Develop discrepancy
  - 3. Avoid argumentation
  - 4. Roll with resistance
  - 5. Support self-efficacy.

- Perception of discrepancy between where they are and where they want to be → motivation for change
- **not** conveying to the client the impression that "you are a loser because you smoke marijuana"
- reflect the client's own stated concerns of how his or her marijuana use is interfering with goal attainment

# MET (Motivational Enhancement Therapy)

- Five Strategies:
  - 1. Express empathy
  - 2. Develop discrepancy
  - 3. Avoid argumentation
  - 4. Roll with resistance
  - 5. Support self-efficacy.

→

- not seek to prove or convince by force of argument
- If client becomes defensive or hostile → therapists role?

# MET (Motivational Enhancement Therapy)

- Five Strategies:
  - 1. Express empathy
  - 2. Develop discrepancy
  - 3. Avoid argumentation
  - 4. Roll with resistance
  - 5. Support self-efficacy.

- Opposition to change → if counter argument → defends and strengthen original stated position

- Empathetically reflecting the client's hesitancy to change → letting the client know that it will be up to him or her to decide if and when to change.

# MET (Motivational Enhancement Therapy)

- Five Strategies:
  - 1. Express empathy
  - 2. Develop discrepancy
  - 3. Avoid argumentation
  - 4. Roll with resistance
  - 5. Support self-efficacy

- Support the client's belief that he/she can change
- Ask clients about previous successful experiences

# MET (Motivational Enhancement Therapy)

- MET skills throughout all 5 sessions,  for 2 important reasons:
  - Many clients will **remain ambivalent** beyond the two planned MET sessions
  - The MET style helps **avoid the potential authoritarian** power struggle of an adult therapist telling adolescent clients what they "must" do.

# CBT (Cognitive Behavioral Therapy)

- The foundation for CBT group sessions → already been established in the introduction to functional analysis section in session 2
- Each of the group sessions focuses on a **particular skill** designed to help them abstain from marijuana and other substance use

# FUNCTIONAL ANALYSIS

Personal Awareness: What Happens Before and After I Use Marijuana?

| TRIGGER | THOUGHTS AND FEELINGS | BEHAVIOR | POSITIVE RESULTS | NEGATIVE RESULTS |
|---|---|---|---|---|
| (What sets me up to be more likely to use marijuana?) | (What was I thinking? What was I feeling? What did I tell myself?) | (What did I do then?) | (What good things happened?) | (What bad things happened?) |
| Friend called and invited me to smoke with him. Nothing else to do. | "I want to reward myself." "I'm bored." "Felt good about going 15 days w/o smoking, so felt OK about smoking today." | Went out with friend and smoked. | Had fun. Felt good to get high, having gone 15 days without. | Broke the 15-day abstinence (although wasn't too worried about this). Didn't get as much done. Didn't feel as healthy. |
| | | | | |

# CBT (Cognitive Behavioral Therapy)- Key Concepts

- Focused on training people in interpersonal and self-management skills
- The primary goal: to master the skills needed to maintain long-term abstinence
- The essence of the self-control or self-management approach:

  **One can learn how to escape from the clutches of the vicious cycle of addiction, regardless of how the habit pattern was originally acquired**

# CBT (Cognitive Behavioral Therapy)

- In each CBT session, the focus is on teaching a particular skill:
  - **(1) Marijuana refusal skills**
  - **(2) Enhancing the social support network**
  - **(3) Coping with relapses**
- The **poster** corresponding to the current session should be hung in the group room where everyone can read it

# CBT (Cognitive Behavioral Therapy)

- Start by providing a **rationale** for learning that skill ("why?" part of the poster)
  - More meaningful to clients if therapists draw parallels between the rationale and events in group members' lives
- Next, therapists **review** the skill guidelines shown on the **posters**.
  - These guidelines come alive by illustrating them with examples and explicitly stating how they are relevant to clients' lives.

# CBT SESSIONS POSTERS

SESSION 5

## PLANNING FOR EMERGENCIES AND COPING WITH RELAPSE

Why?

- Preparation for an emergency increases good coping skills.
- Problem solving is a way to cope.
- Emergencies and relapses are learning opportunities.

## SKILL GUIDELINES

Types of Possible Emergencies:

- An unanticipated marijuana trigger.
- Separation from an important person in your life.
- School problems.
- Adjustment to a new life situation or new responsibilities.

Session 4

## ENHANCING ONE'S SOCIAL SUPPORT NETWORK

WHY?

- When people try to quit marijuana, support helps them succeed.
- People often don't have as much support as they'd like.

## Skill Guidelines

**WHO might provide good support?**

- Consider family, friends, acquaintances, others in your community.
- Someone who is usually supportive.
- Someone who is usually neutral.
- Someone who might become supportive.

**WHAT kinds of support can you ask for?**

- Help with problem solving.
- Information.
- Moral support.
- Sharing the load.
- Emergency help.

**HOW can you get the support you need?**

- Ask for what you need.
- Add new supporters.
- Lend your support to others.
- Give your supporters feedback.

# CBT (Cognitive Behavioral Therapy)

- Emphasize the importance of:
  - **Real life practice** of the skills
  - Practice within the group through **roleplaying**.

# Marijuana Refusal Skills Reminders

When someone asks you to use marijuana, keep the following in mind:

- Say "No" first.
- Make sure your voice is clear, firm, and unhesitating.
- Make direct eye contact.
- Suggest an alternative:

  Something else to do.
  Something to eat or drink.

- Change the subject.
- Avoid vague answers.
- Don't feel guilty about refusing to use marijuana.
- If necessary, ask the person to stop offering you marijuana and not to do so again.

## *Real Life Practice*

Listed below are some examples of people who might offer you marijuana in the future. Give some thought to how you will respond to them, and write your responses below each item.

Someone close to you who knows about your marijuana problem:

_____

_____

A school friend:

_____

_____

_____

A coworker (if you have a job):

_____

_____

A new acquaintance:

_____

_____

A person at a party with others present:

_____

_____

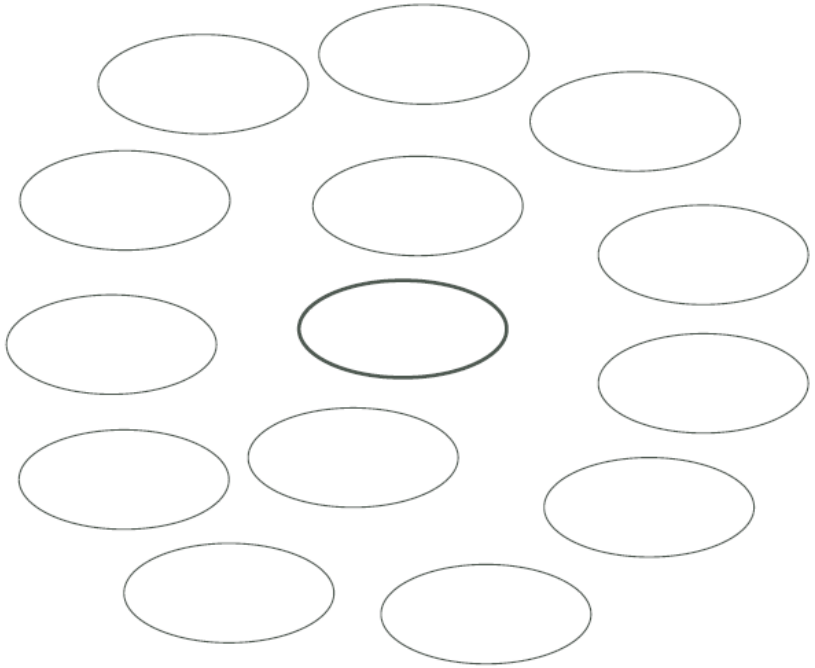
A relative at a family gathering:

_____

# Social Circle Diagram

Use the grid below to diagram your own social support circle, focusing on those who could support you in addressing your marijuana issue.

Put your name in the center space, then fill in the names of those who do and/or could support you in your goal. Put the people who could be of greatest support to you closest to your space. Fill in as many of the spaces as you can.



# MET/CBT5

| Session | Modality | Time | Approach | Topics |
|---|---|---|---|---|
| 1 | Individual | 60min | MET | • Rapport<br>• Motivation building<br>• Review of personalized feedback report |
| 2 | Individual | 60min | MET | • Goal setting<br>• Introduction to functional analysis<br>• Preparation for group sessions |
| 3 | Group | 75min | CBT | • Marijuana refusal skills, with roleplay practice exercises |
| 4 | Group | 75min | CBT | • Enhancing social support network<br>• Increasing pleasant activities |
| 5 | Group | 75min | CBT | • Coping with unanticipated high-risk situations and relapses |

# Thanks for your attention