

the Holistic Harm Reduction  
Program (HHRP+) for  
People With HIV/AIDS Who  
Are Addicted to Illicit Drugs

at

Yale University School of Medicine  
and the APT Foundation, Inc.

# 1995 - Stage I

## Development of HHRP<sup>+</sup>

[Formerly Risk Reduction Therapy (RRT)]

### Principal Investigators:

- S. Kelly Avants, Ph.D.
- Arthur Margolin, Ph.D.

### Project Director:

- Dominic DePhilippis, Ph.D.

**Funded by National Institute on Drug Abuse**

(K21-DA00277 to Dr. Avants)

Publication: Avants, S.K., Margolin, A., DePhilippis, D., & Kosten, T.R.  
(1998) *Journal of Substance Abuse Treatment*, 15(3), 261-266

# 1996 - Stage II Evaluation of HHRP<sup>+</sup>

- S. K. Avants, Ph.D.
- Arthur Margolin, Ph.D.
- Lara A. Warburton, Ph.D.
- Keith Hawkins, Psy.D.
- Julia Shi, M.D.

**Funded by National Institute on Drug Abuse**

(R01-DA10851 to Drs. Avants and Margolin)

Publication: Margolin A, Avants SK, Warburton LA, Hawkins KA, Shi J.  
(2003). Health Psychology, 22(2), 223-228.)

# HHRP+ Randomized Clinical Trial Design

- Study sample: 90 injection drug users with HIV/AIDS enrolled in a methadone clinic
  - 49% African-American; 15% Hispanic; 36% White
- HHRP+ was compared to:
  - standard methadone maintenance that included 6 sessions of HIV risk reduction training
- Outcomes were compared at 6 and 9 months
- Outcomes included:
  - Urine toxicology
  - HIV Risk behavior
  - Medication Adherence

# HHRP+ Randomized Clinical Trial

## Results

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82% completed 12 or more weeks; 64% completed 6 months

### During 6-month treatment:

Decreased: Heroin use

Increased: HIV medication adherence

Increased: Harm reduction skill

### At 9-month follow-up:

Lower: Addiction severity scores

Fewer: HIV risk behaviors

# 1999 – HHRP Stage III Replication and Generalization Study

- S. Kelly Avants, Ph.D.
- Arthur Margolin, Ph.D.
- Mary Helen. Usubiaga, M.D.
- Lara A. Warburton, Ph.D.
- Michael Copenhaver, Ph.D.
- Cheryl Doebrick, Ph.D.

**Funded by National Institute on Drug Abuse**

(R01-DA08754 to Drs. Avants and Margolin)

Publication: Avants, S.K., Margolin, A., Usubiaga, M.H., & Doebrick, C. (2004). *Journal of Substance Abuse Treatment*, 26, 67-78.

# HHRP for HIV-negative or undifferentiated drug users

- Sample: 220 methadone maintained IDUs (70% male; 35% ethnic minorities)
- Design: 12 weeks HHRP vs standard care
- Results:
  - 86% completed 12 week treatment
  - Less cocaine use and unsafe sex during treatment
  - Increased information, motivation, and skill for sex-related HIV prevention

# Recent Adaptations of HHRP

## Departments of public health:

- State of Connecticut
- State of California

## International adaptations:

- Adaptation for drug users in Malaysia.
- Adaptation for drug users in Australia.

## Integration of HHRP with other interventions:

- Acupuncture.
- Pharmacotherapies.



# CDC Dissemination Project

Project Officer: Camilla Harshbarger, Ph.D.

HHRP+ Key Personnel:

- Ruth Arnold, Ph.D.
- S. Kelly Avants, Ph.D.
- Greg Bivens, M.A.
- Arthur Margolin, Ph.D.

Consultant: Paul Simons

# HHRP+

## for drug users living with HIV/AIDS

Dedicated to ...

reducing harm

promoting health

improving quality of life

# Reducing Harm

- Drug users living with HIV/AIDS are viewed as autonomous individuals responsible for making personal choices concerning their behavior.
- HHRP+ provides resources to help client make personal choices that will reduce harm to self and others.
- In HHRP+, a client's decision to continue engaging in high risk behavior is viewed without judgment, but in accordance with federal, state, and local laws.

# Promoting Health

- Drug users living with HIV/AIDS have unique medical/social problems that may contribute to high risk behavior.
- HHRP+ addresses medication adherence and the potential for HIV superinfection, as well as the psychological and social problems associated with HIV infection.

# Improving Quality of Life

- Improving quality of life includes addressing spiritual health as well as physical and emotional health.
- Spiritual beliefs are related to HIV preventive behavior.
- HHRP+ addresses spiritual well-being in addition to teaching HIV risk reduction.

# I-M-B Model of HIV Preventive Behavior Change

I = Information

M = Motivation

B = Behavioral Skills

# Information

- HIV transmission
- HIV super-infection
- HIV disease progression
  - Drug use
  - Other infectious diseases
- HIV medication resistance

# Motivation for harm reduction

- HIV-negatives and HIV-positives may have different motivation
- Do not appeal solely to altruistic motivation
  - Study: 66% of HIV-positive drug users engaged in high risk behavior post-HIV testing
  - Study: Many cope with HIV test result by using drugs and engaging in high risk behavior
- Appeal to personal self-interest



# Behavioral Skills

- Continuum from abstinence to safer drug use and sexual practices
  - Safer drug use:
    - needle exchange, disinfecting drug paraphernalia
  - Safer sexual practices
    - latex products, selection, and use
- Harm reduction negotiation with others
- Active participation in health care

# Cognitive Remediation Model

- HIV-related Information, Motivation, and Behavioral Skills requires cognitive capacities that may be impaired in people with HIV/AIDS who use illicit drugs
- HHRP+ uses cognitive remediation strategies to increase information, and motivation, and to improve skills

# Study of Cognitive Functioning

## Study design:

- 90 HIV-positive injection drug users
- Neuropsychological test battery assessed:
  - Learning and memory of verbal information
  - Capacity to solve new problems
  - Visual-motor coordination
  - Cognitive flexibility

## Study findings:

- 88% of sample showed evidence of cognitive impairment

# HHRP+ Cognitive Remediation Strategies

- Group modality
- Multimodal presentation of material
- Learning by doing – behavioral games
- Repetition and review
- Memory books, acronyms, rhymes
- Structure and consistency
- Assessment with feedback
- Stress management

**HHRP+**

# HHRP+ Materials

## The HHRP+ Counselor Manual:

- Detailed script for didactic material
- Group agenda, with recommended timing
- Toolbox listing materials needed
- Special instructions and quiz material highlights

## Other materials provided:

- Slides, video segments, quizzes
- Certificate of HHRP+ Completion
- Stress management technique (script/tape)

# HHRP+ Structure and Format

- 12 two-hour groups with break mid-way
- Before break:
  - Group rules, announcements, agenda, time keeper
  - Didactic material delivered verbally/visually
- After break:
  - Review
  - Experiential exercise
- End of Group:
  - Quiz with immediate feedback
  - Stress management exercise

# Group 1: Reaching Your Goals

- Information:
  - Verbal and visual presentation of material concerning how to establish and reach health-related goals
- Motivation:
  - Effect of drugs on the brain (memory, concentration)
- Behavioral Skills:
  - Memory compensation strategies learned
  - ‘Concentration’ game – memory for healthy choices



***This is your brain***



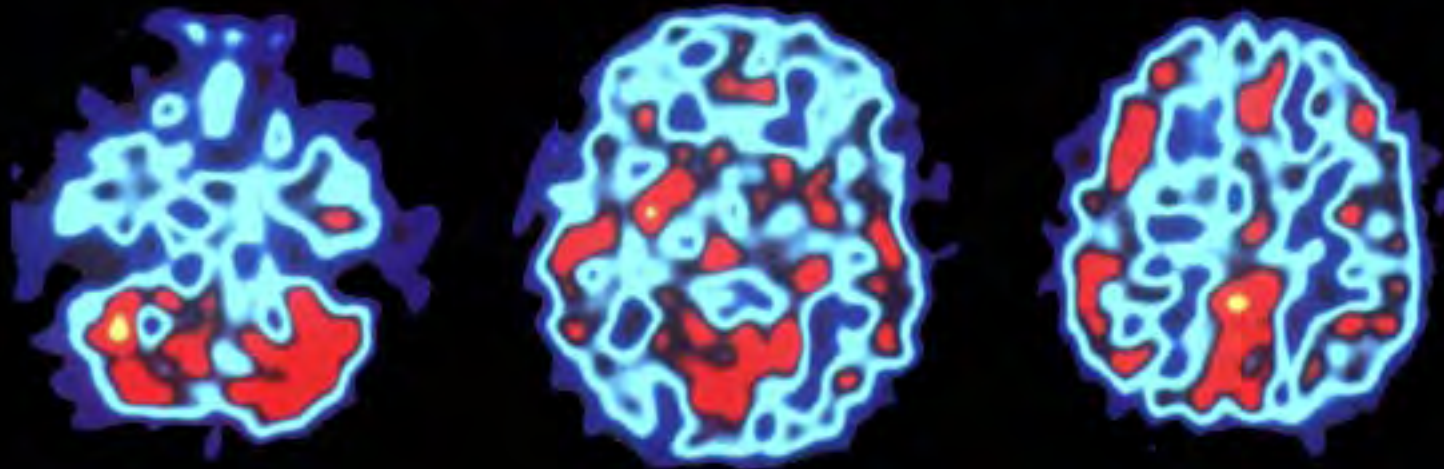
***This is your brain on DRUGS***



## Healthy Control



## Cocaine Dependence



# Experiential Component

## Group 1

### Reaching Your Goals

- Memory demonstration
- Game – ‘Concentration’

# Group 2: Reducing Drug-Related Harm

- Information:
  - Verbal/visual presentation of multiple harms caused by drug use and the ABC continuum of harm reduction
    - A = Abstinence;
    - B = Buy/Obtain new needles, never share
    - C = Clean drug paraphernalia with bleach
- Motivation:
  - Reasons to CARE not SHARE
- Behavioral Skills:
  - Videotaped needle cleaning demo, practice, and game



# The Pyramid of Harm Reduction Strategies for Injection Drug Users



*Learning your **ABC's** can save your life and the life of your partner*

# Experiential Component

## Group 2

### Reducing Drug-Related Harm

- Disinfecting drug paraphernalia  
(demonstration, practice, and game)

# Group 3: Reducing Sex-Related Harm

- Information:
  - Verbal/visual presentation of multiple harms caused by unsafe sex and the ABC continuum of harm reduction
    - A = Abstinence;
    - B = never exchange **B**ody fluids,
    - C = always use **C**ondoms
- Motivation:
  - Reasons to C-A-R-E
- Behavioral Skills:
  - Video demo of latex selection and application, client practice, and game





BE  
PREPARED



## Three Little Words to Remember

# *Before Having Sex*

*Latex*



**Condoms**

- vaginal or anal intercourse
- fellatio (penis oral sex)

*Latex*



**Dental Dams**

- cunnilingus (vaginal oral sex)
- anilingus (anal oral sex)

You can cut latex glove or condom

*Latex*



**Gloves**

- digital-vaginal or digital-anal sex
- vaginal or anal fisting

Avoid manual-genital contact if there is broken skin or during menstruation

# Experiential Component

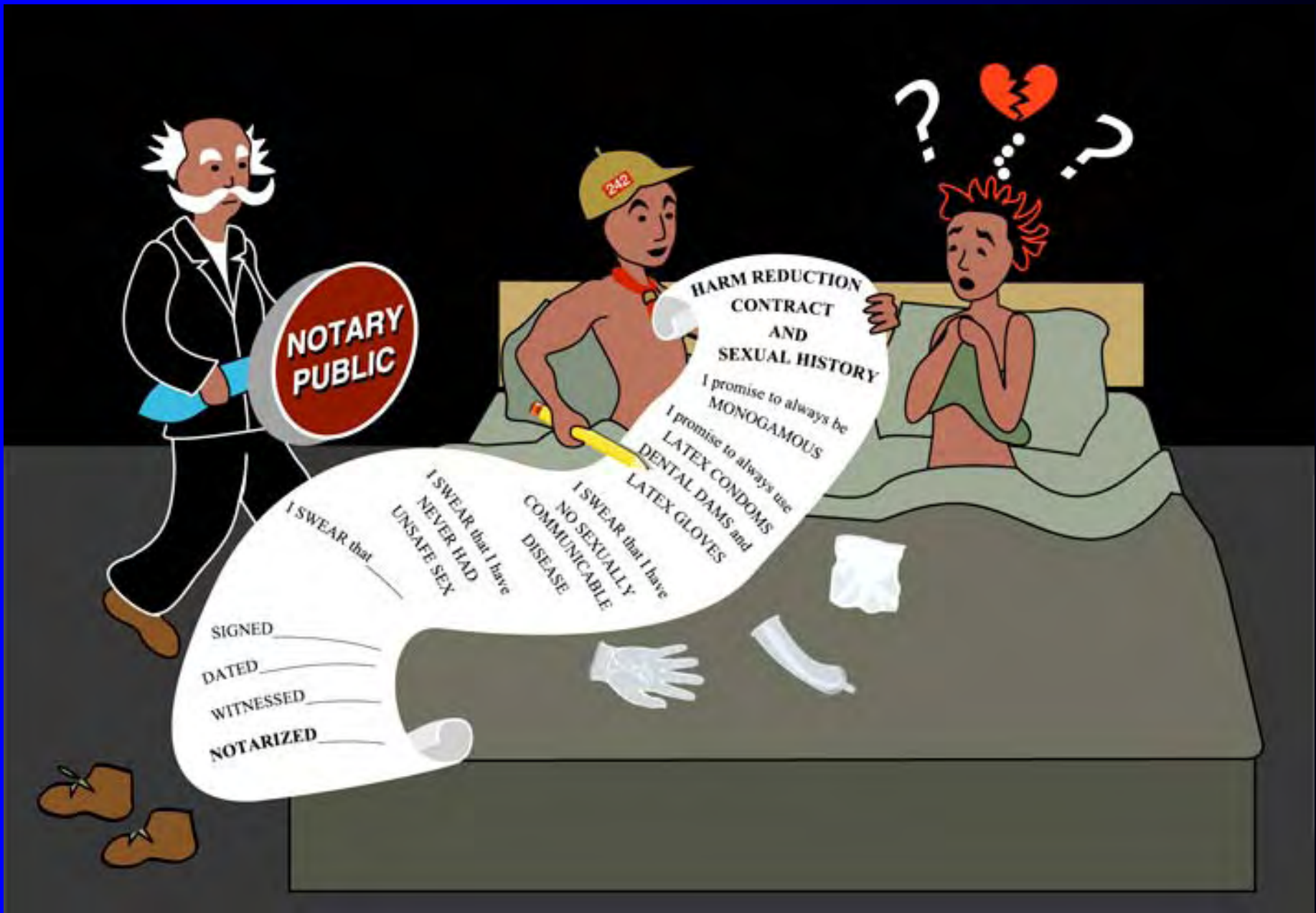
## Group 3

### Reducing Sex-Related Harm

- Latex products, selection, and use  
(demonstration, practice, and game)

# Group 4: Harm Reduction Negotiation

- Information:
  - Verbal/visual presentation of negotiation and persuasion and overcoming obstacles to harm reduction in various sexual situations
- Motivation:
  - Reasons to C-A-R-E
- Behavioral Skills:
  - Video: Observe/critique a couple negotiating
  - Role-play game, practice negotiating



# *Reasons to CARE, about SAFER SEX*

**C**ompromised Immune System *(HIV+ individuals are susceptible to other life threatening sexually transmitted infections)*

**A**ltruism *(you can help protect others)*

**R**einfection *(you can be reinfected with a strain of HIV virus that is resistant to new medications)*

**E**vidence *(Research shows that condoms reduce the spread of HIV and other sexually-transmitted diseases)*

# Experiential Component

## Group 4

### Negotiation Harm Reduction

- Negotiating with partners  
(demonstration, critique, role-play)

# Group 5: Preventing Relapse

- Information:
  - Visual/verbal presentation of metaphor -- ‘Harm Reduction as Journey’ -- tools needed to stay on healthy path and remain safe and sober
- Motivation:
  - Discussion of ‘Seemingly Irrelevant Decisions’ (SIDs) that influence one’s own health and health of others
- Behavioral Skills:
  - Game: practice identifying and circumventing SIDs

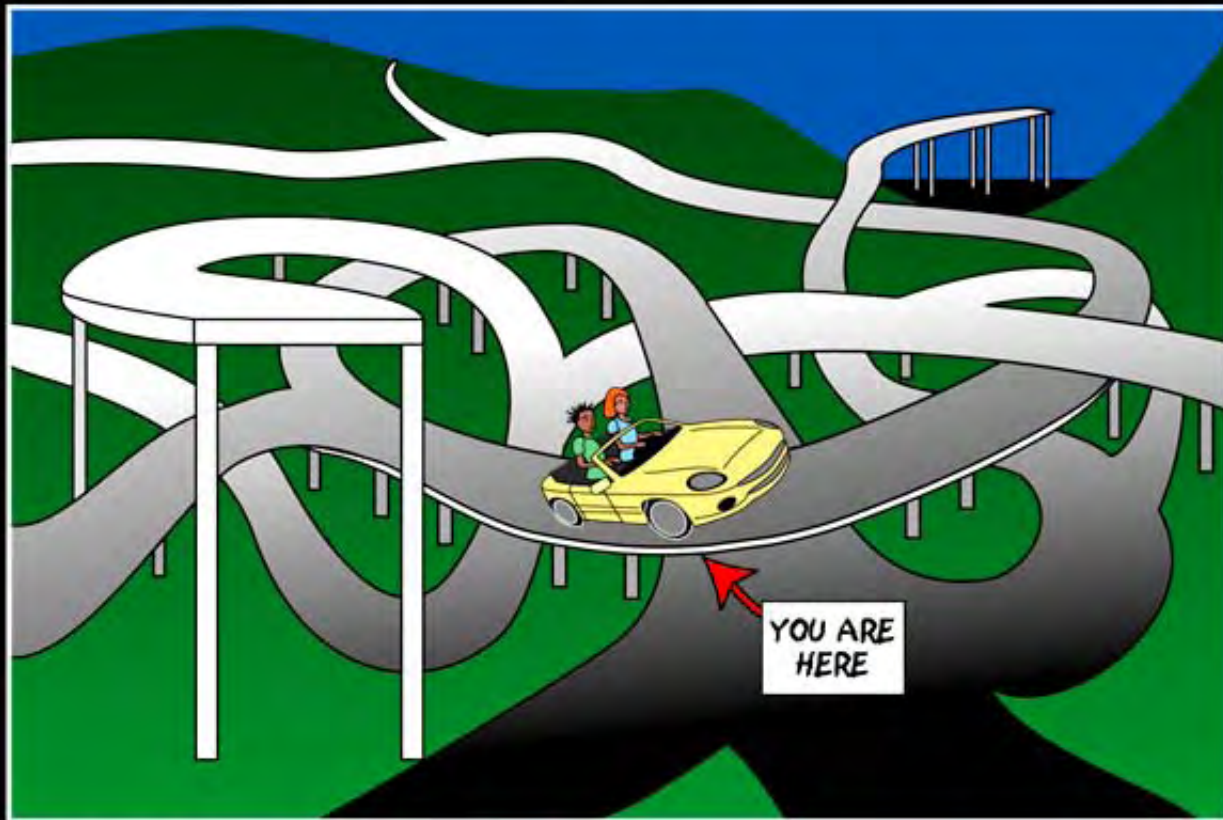


When you begin your journey  
the road seems straight  
your destination seems clear



The road to recovery is paved with good intentions

# FINDING YOUR WAY ISN'T ALWAYS EASY



**With skill and tools you will be able to make fast, accurate, and safe decisions**

# KNOW YOUR INTERNAL WARNING SIGNS



HUNGRY  
ANGRY  
LONELY  
TIRED



AND WHATEVER YOU DO,  
DON'T STOP  
FOR HITCHHIKERS

# Experiential Component

## Group 5

### Preventing Relapse

- ‘Seemingly Irrelevant Decisions’  
game

# Group 6: Health Care Participation

- Information:
  - Verbal/visual presentation on being a positive participant in the HIV/AIDS health care system
- Motivation:
  - Understand immune system and effect of drug use and non-adherence on disease progression
- Behavioral Skills:
  - Communicating with health care providers
  - Overcoming obstacles to medication adherence game

# PATIENT

WEBSTER'S DEFINITION OF PATIENT:

*(from the Latin)*

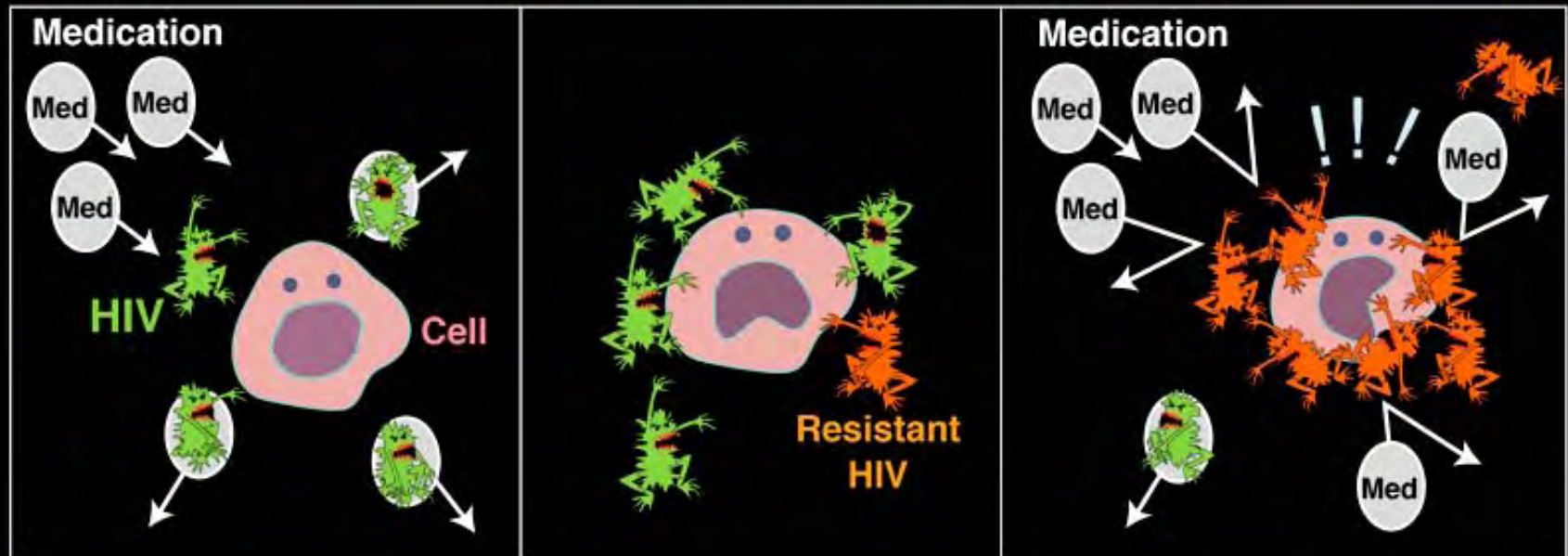
**ONE WHO SUFFERS**

HHRP<sup>+</sup> DEFINITION OF HIV-POSITIVE PATIENT:

**A "POSITIVE PARTICIPANT"  
IN HEALTH CARE**

# POTENTIAL CONSEQUENCES OF MISSED MEDICATION

## MEDICATION RESISTANCE



Medication suppresses viral replication reducing opportunity for resistant mutations to emerge

Missed medication leads to viral replication and opportunity for resistant mutations to emerge, multiply and grow stronger

Medication not effective against this new form of virus

# Experiential Component

## Group 6

### Health Care Participation

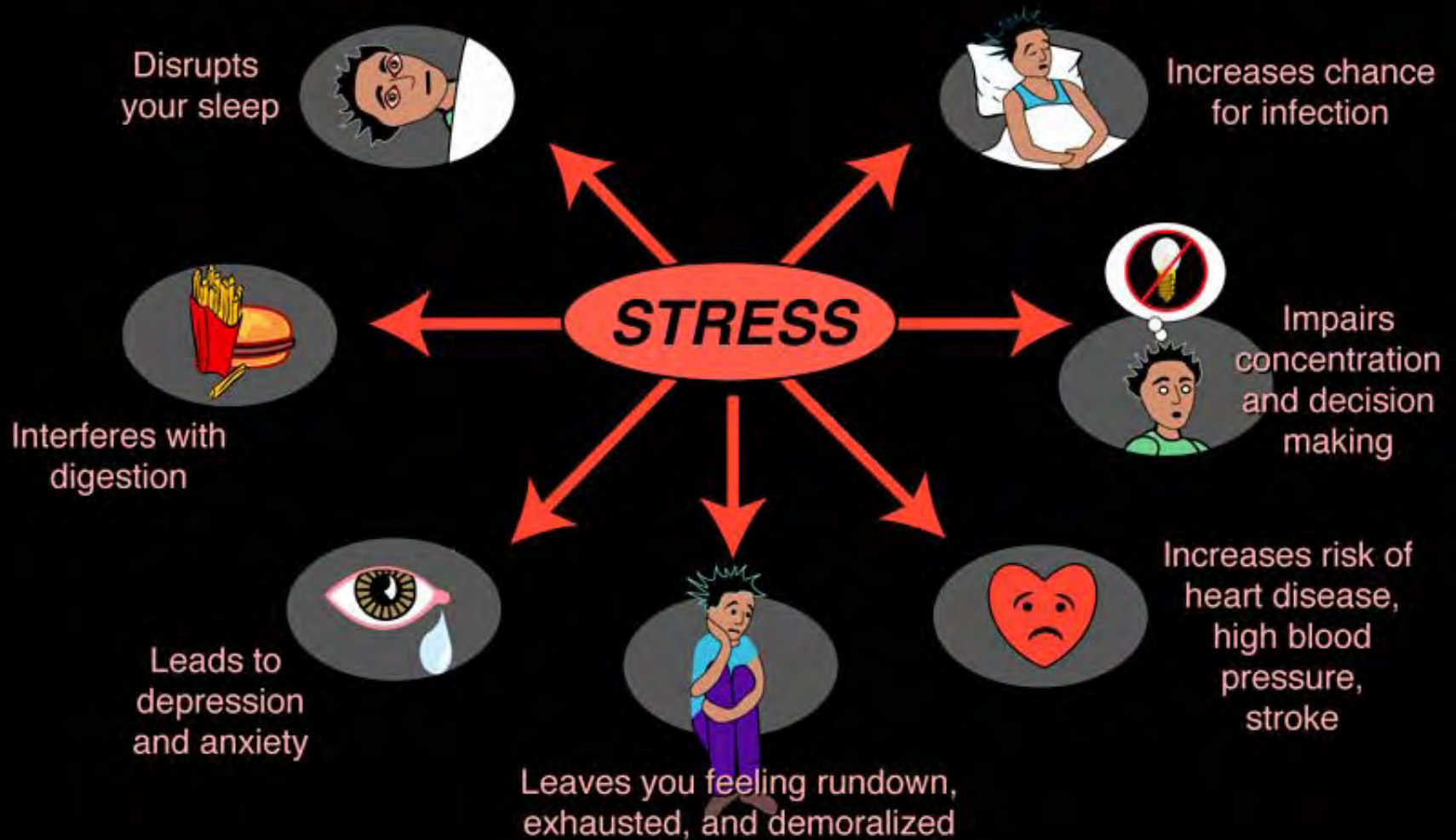
- Game: Identifying and overcoming obstacles to medication adherence



# Group 7: Healthy Lifestyle Choices

- Information:
  - Verbal/visual presentation on effect of stress and maladaptive coping on health and lifestyle choices
- Motivation:
  - Poor coping may influence HIV disease progression
- Behavioral Skills:
  - Stress management techniques taught and practiced
  - Videotaped nutritional guidelines for HIV+ clients
  - Game: practice coping with stressors

# EFFECTS OF STRESS ON HEALTH



# ARE YOU USING ADAPTIVE COPING STRATEGIES?



# Experiential Component

## Group 7

### Healthy Lifestyle Choices

- Practice stress management strategies
- Game: Coping with a stressful situation

# Group 8: Intro to the 12-Steps

- Information:
  - Verbal/visual presentation of the 12-Step Program of AA/NA adapted for HIV+ clients
- Motivation:
  - Finding personal source of strength
- Behavioral Skills:
  - Identifying what can and cannot be controlled
  - Taking action and letting go
  - 12-Step memory game

# SERENITY PRAYER

*God grant me the serenity  
to accept the things I cannot change,  
the courage to change the things I can,  
and the wisdom to know the difference*

# STEP ONE AND HIV

---

*We admitted that we were powerless over our addiction, that our lives had become unmanageable.*

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## **You are powerless over your HIV status**

- you can't change your current HIV-seropositive status

## **This does not mean you are powerless over your actions**

- you can do something to stay healthy

## **Acceptance of HIV infection leads to:**

- awareness of health consequences
- good health care
- taking HIV related medications
- stopping risky behavior

**Acceptance of your HIV<sup>+</sup> status  
can empower you to take control of your life  
and help you maintain your health.**

# Experiential Component

## Group 8

### Introduction to the 12-Steps

#### 12-Step Memory Game



# Group 9: Overcoming Stigma

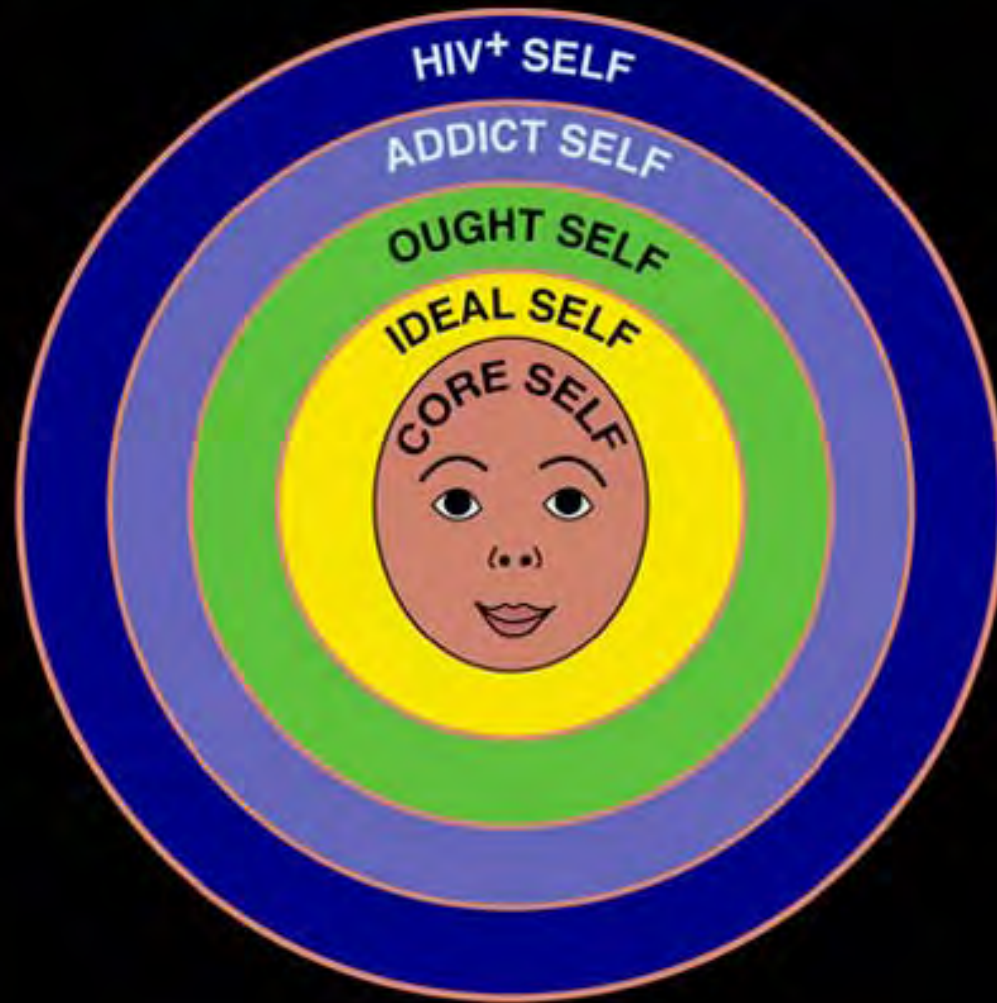
- Information:
  - Verbal/visual presentation on stigmatization and self-fulfilling prophecy
- Motivation:
  - Effects of negative self-concept on health
- Behavioral Skills:
  - Self-reevaluation training game
  - Self-affirmation, visualization, ‘acting as if’



**STIGMA**



What is your "Core" Self beneath all the Labels?



# Experiential Component

## Group 9

### Overcoming Stigma

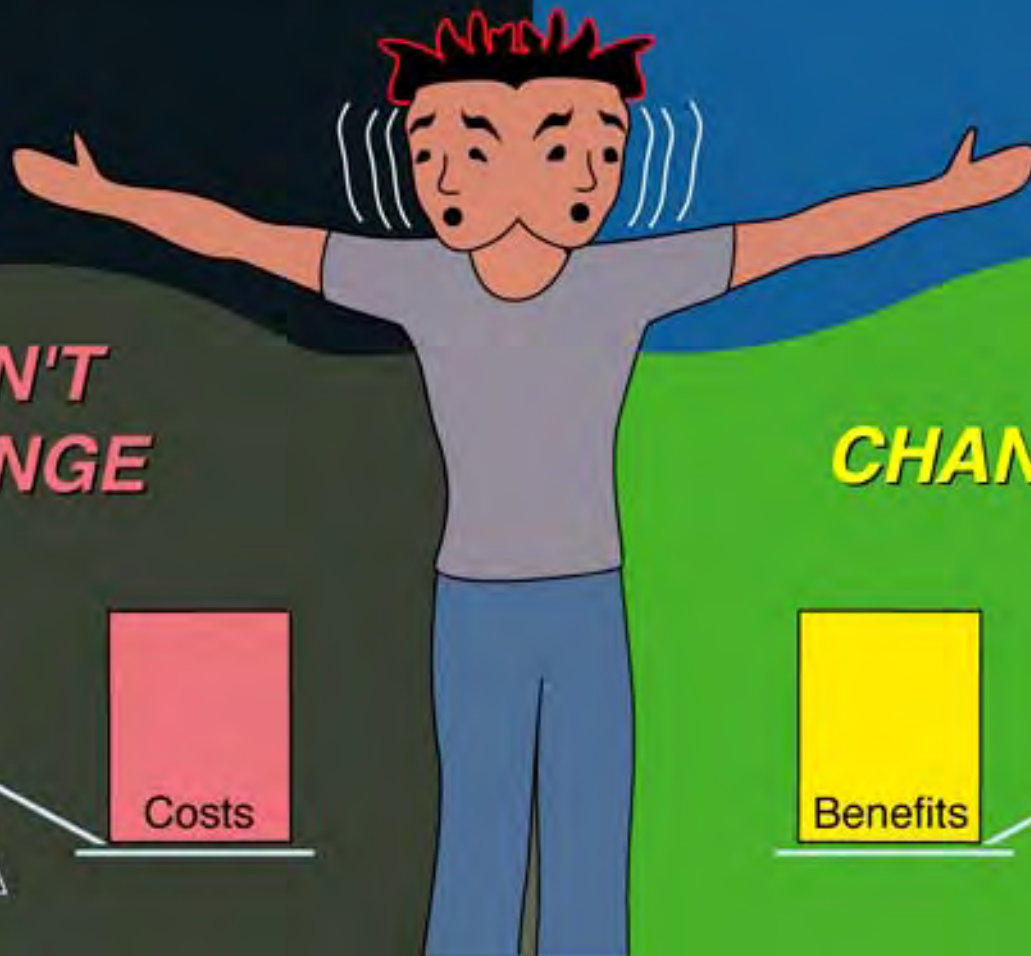
- Practice positive self-affirmations
- Act 'as if' protecting self and others

# Group 10: Overcoming Helplessness

- Information:
  - Verbal/visual presentation of ‘Learned Helplessness’ theory as it relates to health behaviors
- Motivation:
  - Ambivalence and stages of behavior change
- Behavioral Skills:
  - Identify personal stage of change for each health-related behavior and conduct cost-benefit analysis for moving to next stage

# Ambivalent?

To change or not to change? That is the question



**DON'T  
CHANGE**

**CHANGE**

Benefits

Costs

Costs

Benefits

# EMPOWERMENT

*You are not helpless*

---

**Have the courage to change**



**THE BENEFITS OF REDUCING YOUR RISK WILL FAR  
OUTWEIGH THE COSTS OF MAKING A CHANGE**

# Experiential Component

## Group 10

### Overcoming Helplessness

- Assessment: Readiness for change
- Game: Graduating to next stage of change



# Group 11: Moving Beyond Grief

- Information:
  - Verbal/visual presentation of stages of grief and effect on health behavior
- Motivation:
  - Facing fears about HIV
  - Spiritual health
- Behavioral Skills:
  - Taking steps to let go of fear
  - Game: Identifying valued possessions and writing an epitaph 'Remember me by what I valued'

# FEAR IS YOUR WORST ENEMY

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**FEAR OF:**

*Death*

*Suffering*

*Harm to loved ones*

*Loss of lifestyle*



**You have nothing to fear but fear itself**

# PAT FINDS INNER WISDOM

WISDOM

SERENITY

Accept what cannot  
be changed

*Let Go, and Let "God"*

- Prayer
- Meditation
- Visualization
- Ritual

COURAGE

Change what  
can be changed

*Take Steps to Reduce Fear*

- Make your wishes known
- Learn about HIV
- Get support
- Follow medical advice
- Engage in harm reduction



# Experiential Component

## Group 11

### Moving Beyond Grief

- Game: Remember me by what I valued

# Group 12: Healthy Social Relationships and Activities

- Information:
  - Verbal/visual presentation of the effect of social relationships and activities on health
- Motivation:
  - Identifying damaged healthy relationships and the effect of unhealthy relationships on health
- Behavioral Skills:
  - Communication skills: Healing damaged relationships
  - Game: Planning a day of healthy activities

# WHAT YOU DO and WHO YOU DO IT WITH can AFFECT YOUR HEALTH

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## SOCIAL RELATIONSHIPS

```
graph TD; SR[SOCIAL RELATIONSHIPS] --> DU[DRUG USERS]; SR --> NDU[NON-DRUG USERS]; DU --- DW1[drug-related work]; DU --- DW2[drug-related leisure activity]; DW1 --- RH[RISK HEALTH]; DW2 --- RH; NDU --- DW3[drug-free work]; NDU --- DW4[drug-free leisure activity]; DW3 --- PH[PROTECT HEALTH]; DW4 --- PH;
```

### DRUG USERS

drug-related work

drug-related leisure activity

**RISK  
HEALTH**

### NON-DRUG USERS

drug-free work

drug-free leisure activity

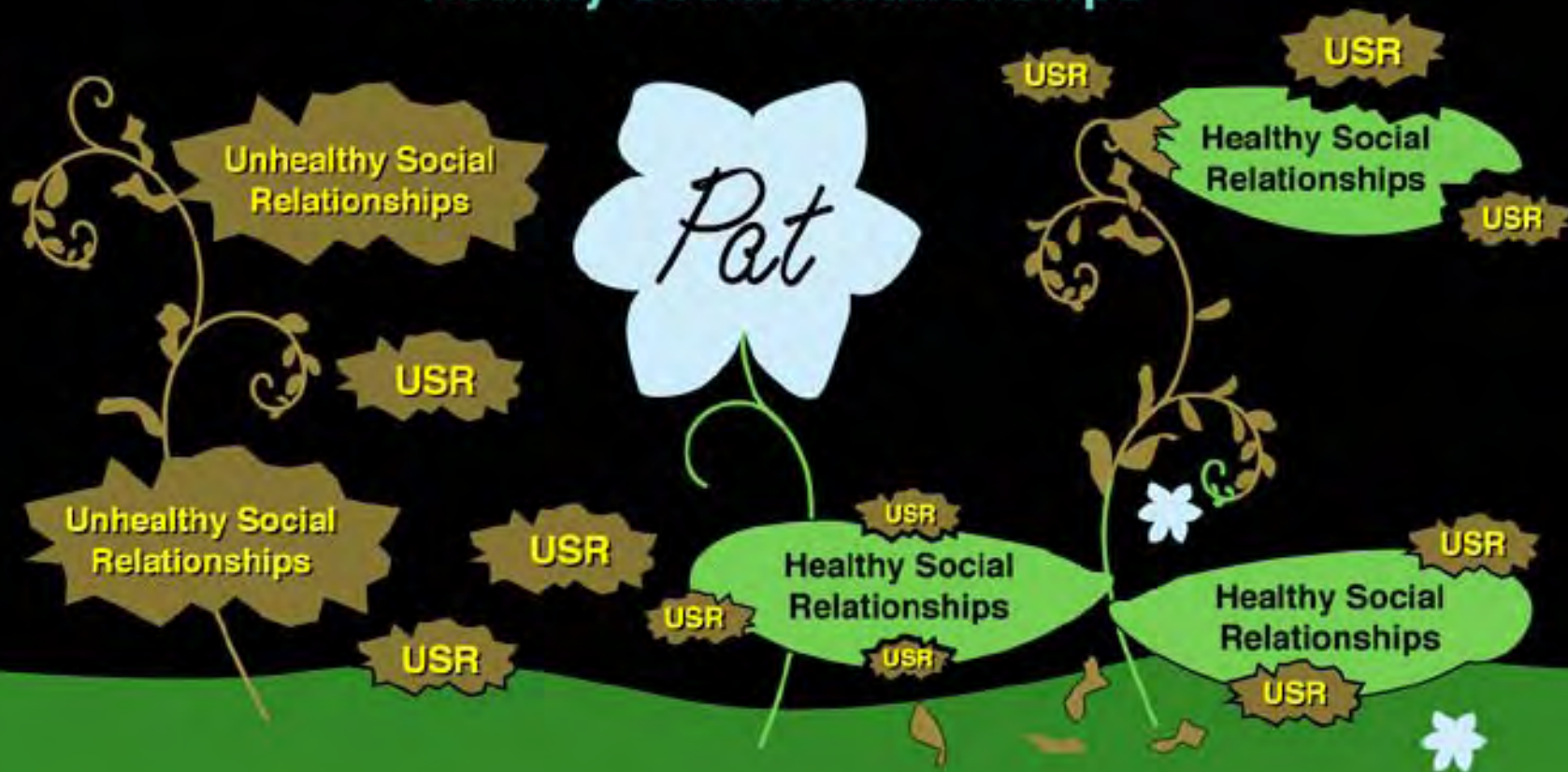
**PROTECT  
HEALTH**

# "USR" INFECTION

**U**nhealthy **S**ocial **R**elationships

Infect, damage, and destroy

Healthy Social Relationships



# Experiential Component

## Group 12

### Healthy Social Relationships and Activities

- Planning a day of healthy activities with non-drug using friends/family



# Individual Sessions

- Orientation Session
  - Treatment contract signed
  - Memory book provided
- Joint session with significant other:
  - Support client's commitment to harm reduction and health promotion
- Other:
  - As needed one-on-one session

**HHRP+**

# Quality Assurance

- Competence and adherence issues
- Provider characteristics
- Adaptation of HHRP+ for different populations

# HHRP+ Provider Characteristics

- Non-judgmental
- Be comfortable with ...
  - principles of harm reduction and candid discussions of drug use and sexual behavior
- Have experience working with ...
  - drug users and people living with HIV/AIDS, and keep abreast of changing standards of care
- Have excellent time-management skills

# Integrity of HHRP+ with different client populations

- HHRP+ now ready to be implemented by CBOs:
  - For HIV-positive or HIV-negative drug users who are currently in treatment for addiction
- Potential HHRP+ adaptations:
  - For non-injection drug users in addiction treatment
  - For drug users unmotivated for addiction treatment
- HHRP+ Adaptation Integrity Issues:
  - Maintaining IMB and cognitive remediation approach



**Thank you.**

We look forward to working with you.