

2005

# Schizophrenia and alcoholism

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## Recommended Citation

Mueser, Kim, "Schizophrenia and alcoholism" (2005). *Presentations*. Paper 5 Samuel B. Guze Symposium on Alcoholism.  
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# **Schizophrenia and Alcoholism**

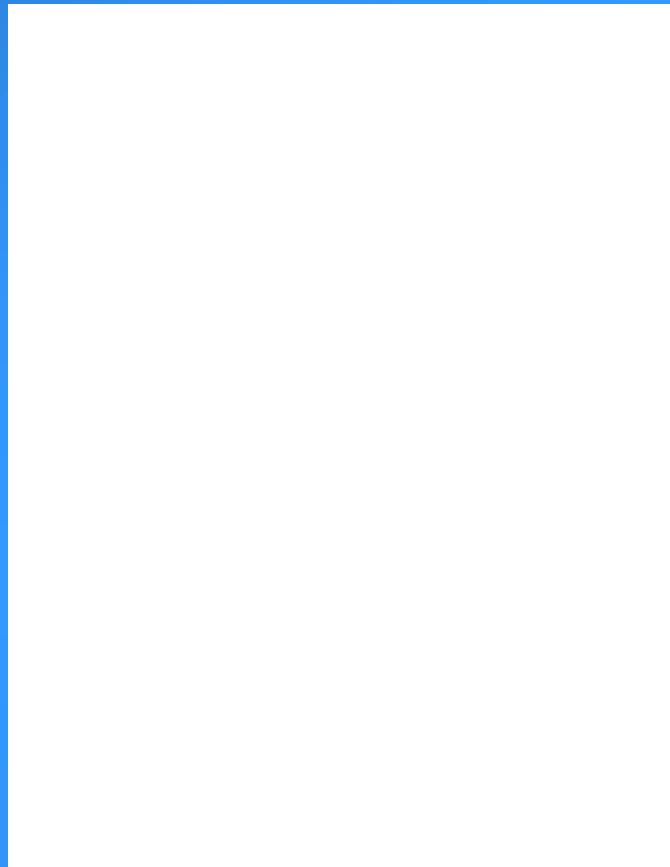
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# Overview

- Prevalence of alcoholism in schizophrenia
- Correlates and consequences of alcoholism in schizophrenia
- Models explaining excessive comorbidity
- Integrated treatment



# Table of Contents

- I. Basics
  - 1. Substance Abuse and Severe Mental Illness
  - 2. Principles of Integrated Treatment
  - 3. Basic Organizational Factors
  
- II. Assessment and Treatment Planning
  - 4. Assessment I: Detection, Classification, and Functional Assessment
  - 5. Assessment II: Functional Analysis and Treatment Planning

# Table of Contents (cont.)

## III. Individual Approaches

6. Stage-Wise Case Management
7. Motivational Interviewing
8. Cognitive-Behavioral Counseling

## IV. Group Interventions

9. Persuasion Groups
10. Active Treatment Groups
11. Social Skills Training
12. Self-Help Groups

# Table of Contents (cont.)

- V. Working with Families
  - 13. Family Collaboration
  - 14. Behavioral Family Therapy
  - 15. Multiple-Family Groups
  
- VI. Other Treatment Approaches
  - 16. Residential Programs
  - 17. Coerced and Involuntary Interventions
  - 18. Vocational Rehabilitation
  - 19. Psychopharmacology

# Table of Contents (cont.)

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  - 13. Family Collaboration
  - 14. Behavioral Family Therapy
  - 15. Multiple-Family Groups
  
- VI. Other Treatment Approaches
  - 16. Residential Programs
  - 17. Coerced and Involuntary Interventions
  - 18. Vocational Rehabilitation
  - 19. Psychopharmacology



# Table of Contents (cont.)

## VII. Research

### 20. Research on Integrated Dual Disorder Treatment

## Epilogue

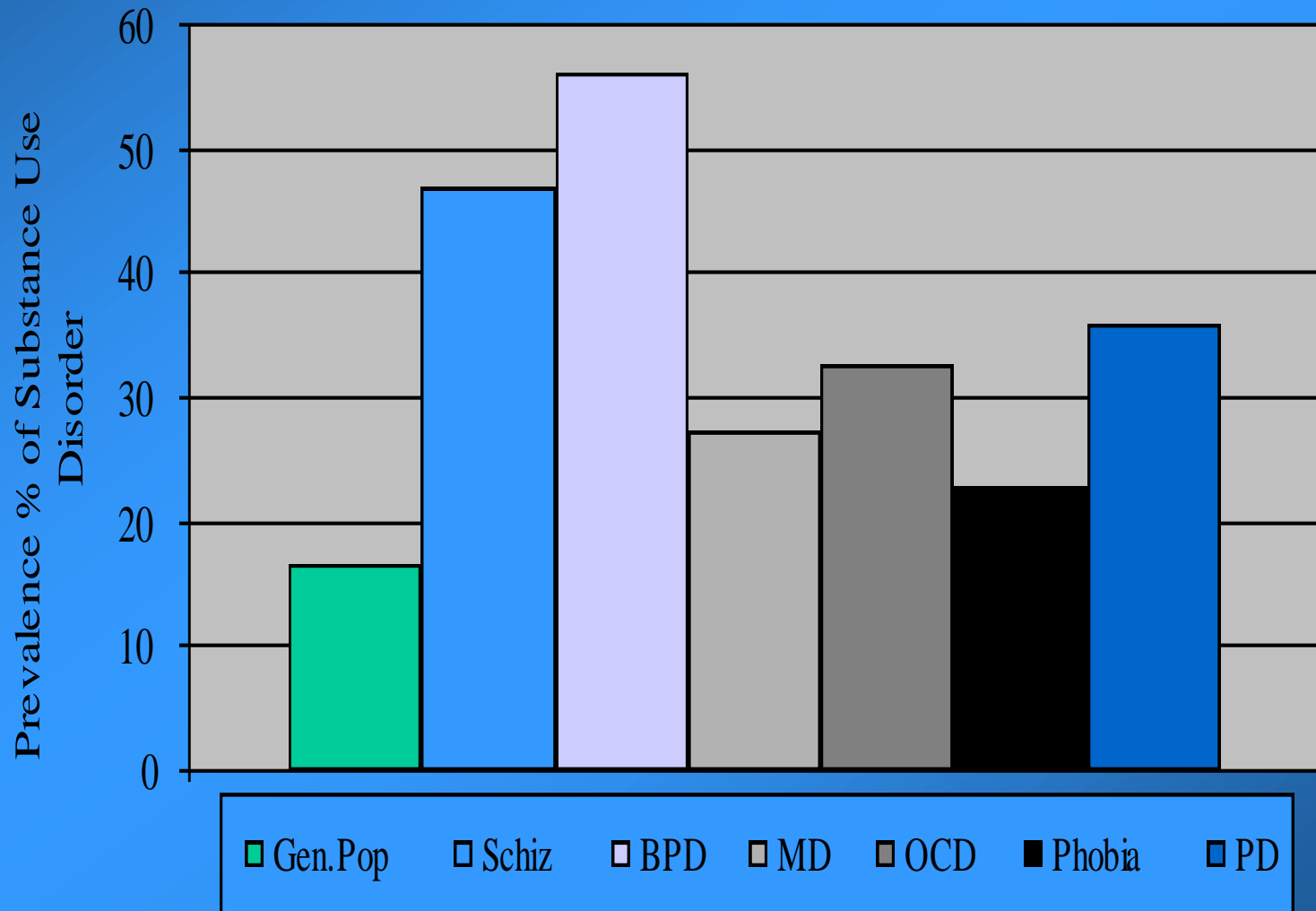
### Avoiding Burnout and Demoralization

# Prevalence (%) of Lifetime Substance Use Disorder for Various Psychiatric Disorders

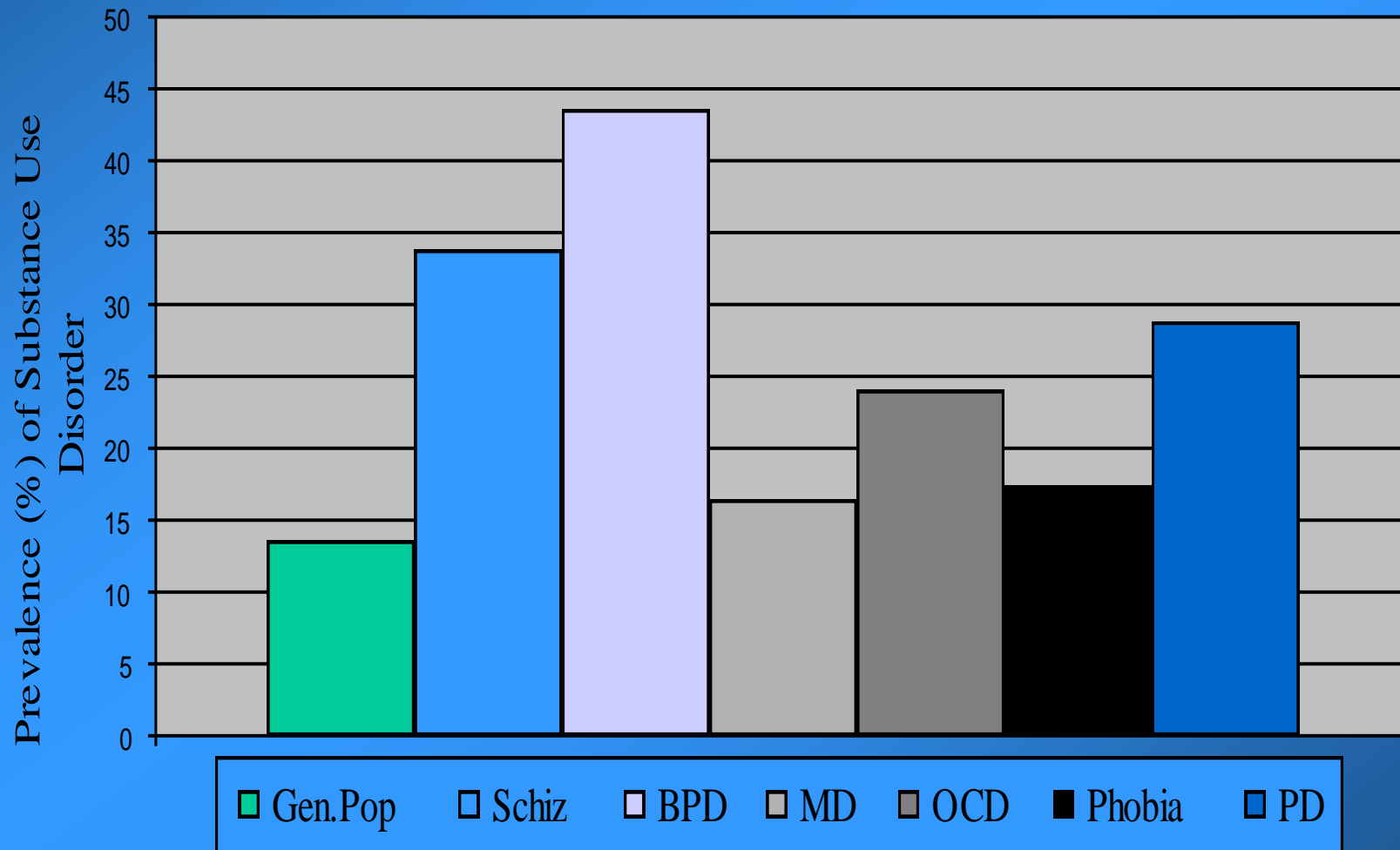
- Any Substance Use Disorder
- Any Alcohol Use Disorder
- Any Drug Use Disorder

\*Data From ECA Study

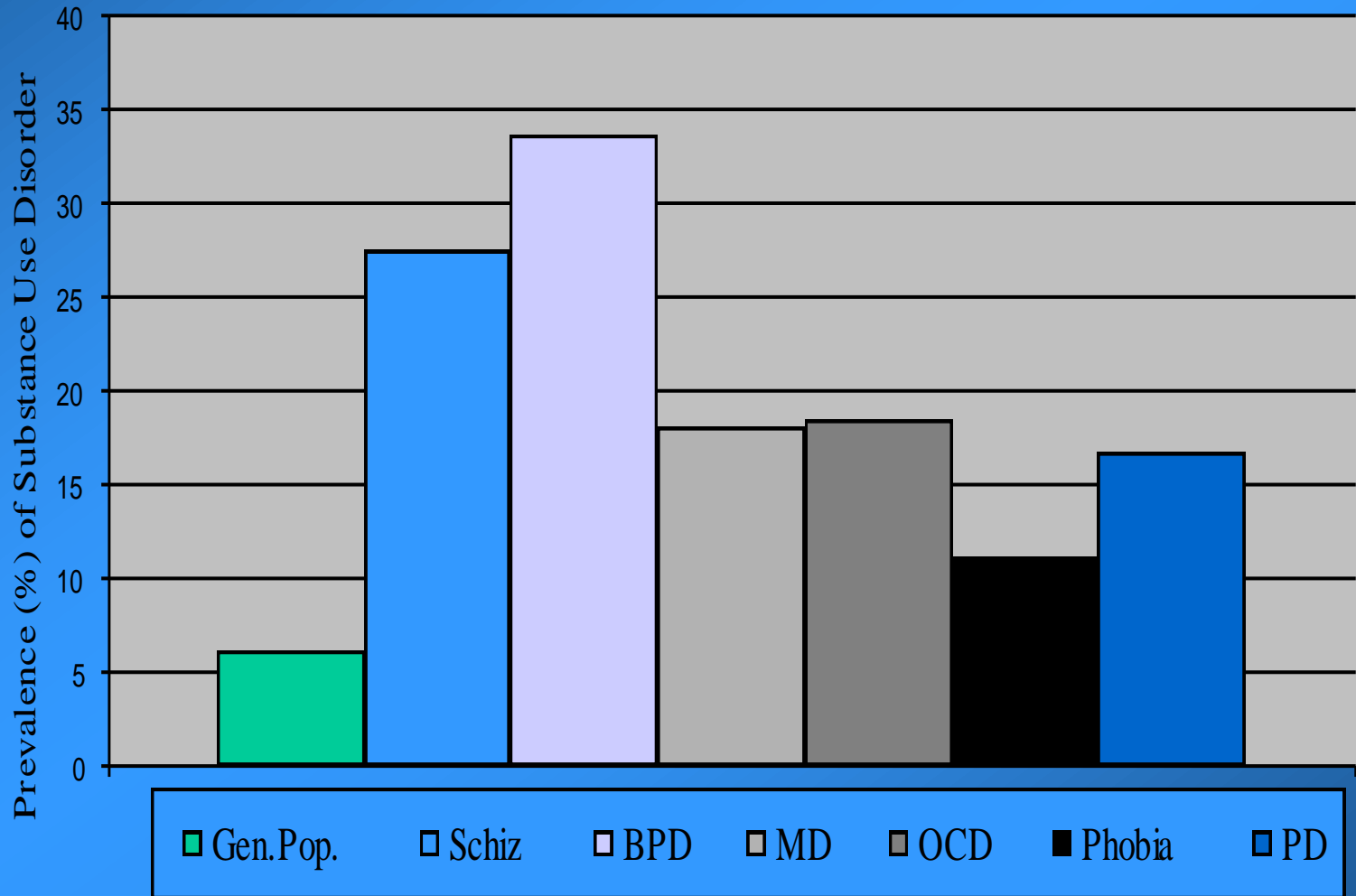
## Any Substance Use Disorder



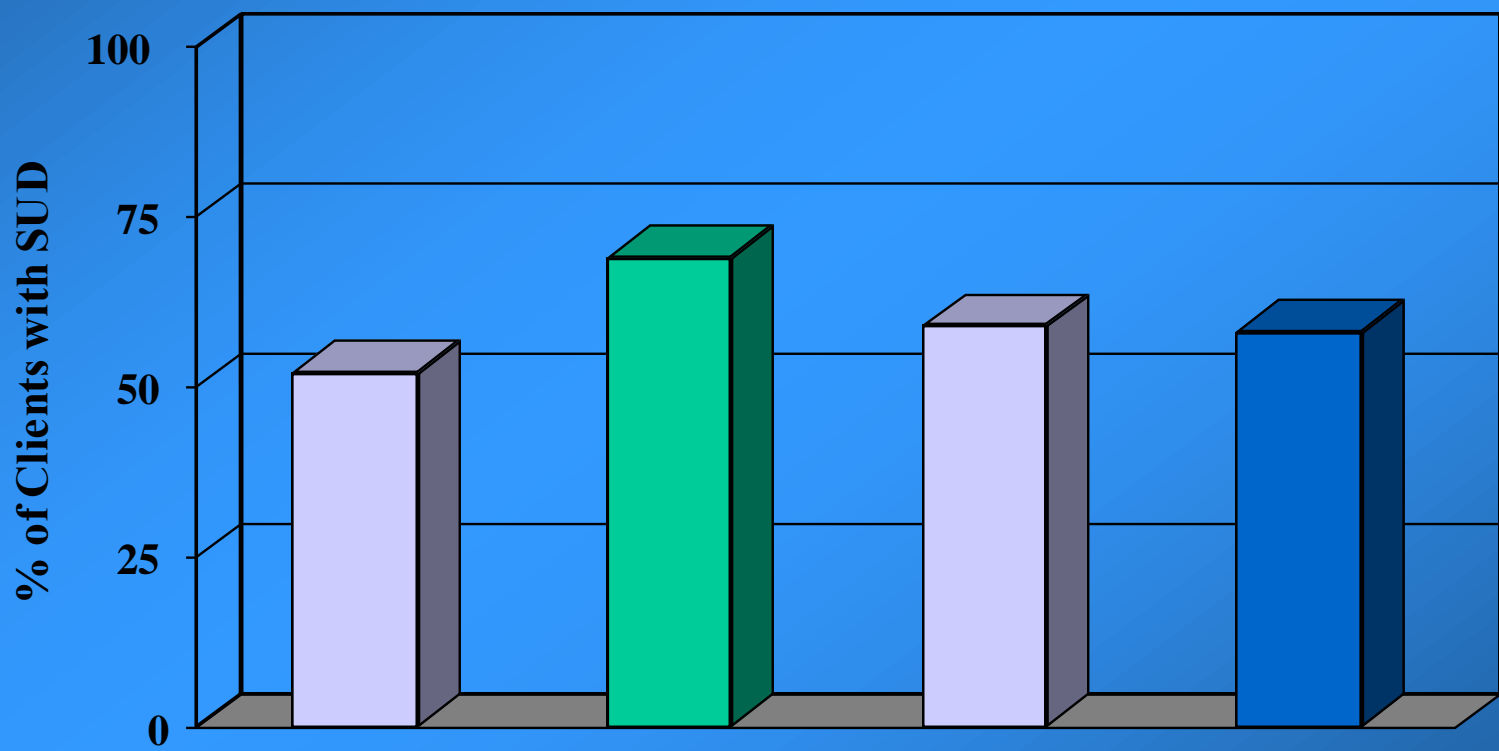
# Any Alcohol Use Disorder



# Any Drug Use Disorder



# Rates of Lifetime Substance Use Disorder (SUD) among Recently Admitted Psychiatric Inpatients (N=325) (Mueser et al., 2000)



# Factors Influencing Prevalence of Substance Use Disorders (SUD): Client Characteristics

## Higher Rates

- Males
- Younger
- Lower education
- Single or never married
- Good premorbid functioning
- History of childhood conduct disorder
- Antisocial personality disorder
- Higher affective symptoms
- Family history SUD

# Clinical Epidemiology

1. Rates higher for people in treatment
2. Approximately 50% lifetime, 25%  
35% current substance abuse
3. Rates are higher in acute care, shelter,  
institutional, and emergency  
settings
4. In most settings, alcohol is most commonly  
abused substance



# Common Consequences of Substance Abuse in Schizophrenia

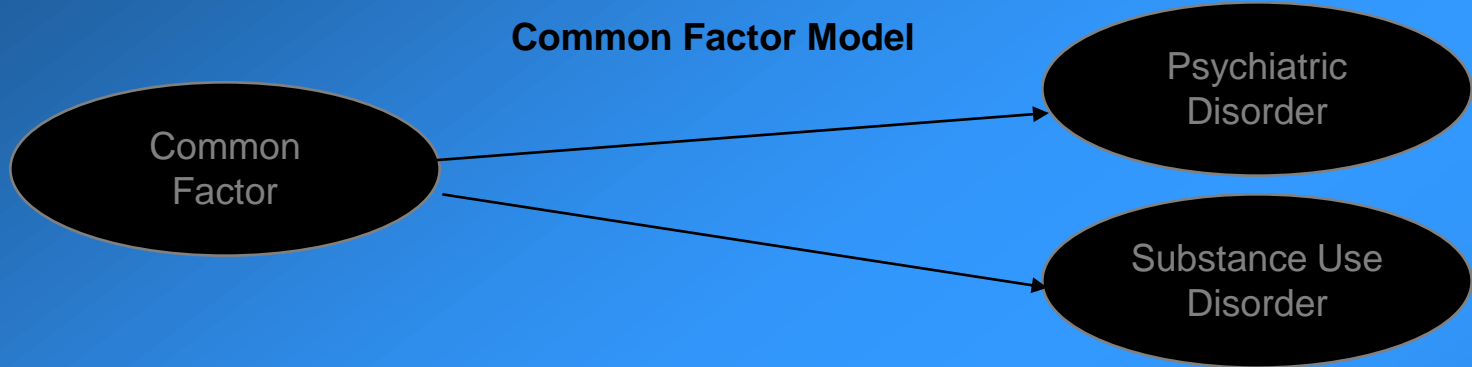
- Relapse and re-hospitalization
- Financial problems
- Family burden
- Housing instability and homelessness
- Non-compliance with treatment
- Violence
- Suicide
- Legal problems
- Prostitution
- Health problems
- Infectious disease risky behaviors

# **Models of Comorbidity: Berkson's Fallacy**

Rates of comorbidity for any two disorders tend to be higher in clinical samples (vs. general population samples) and in treatment settings (than non-treatment settings) because either disorder is likely to propel the person into treatment.

# Models of Comorbidity

## Common Factor Model



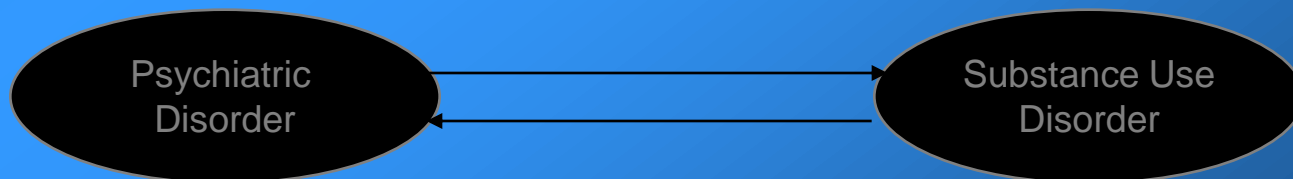
## Secondary Substance Abuse Model



## Secondary Psychopathology Model



## Bi-Directional Model



# Secondary Mental Illness

## Models: Schizophrenia

- Chronic stimulant use as precipitant of schizophrenia: lack of replication of early findings
- Hallucinogen abuse as precipitant of long-term psychosis: clients tend to have relatives with psychosis
- Cannabis prospectively predicts onset of schizophrenia: 1) can't explain stable rate of schizophrenia following rise in cannabis use; 2) may be accounted for by early prodrome involving mood disturbance

# Secondary Substance Abuse Models

- Self-medication
- General dysphoria
- Super-sensitivity
- Secondary psychosocial effects

# Self-Medication Hypothesis

- Substance type unrelated to specific symptoms of schizophrenia
- Symptom severity unrelated to substance abuse
- Clients usually don't report substances reduce symptoms

# General Dysphoria Hypothesis

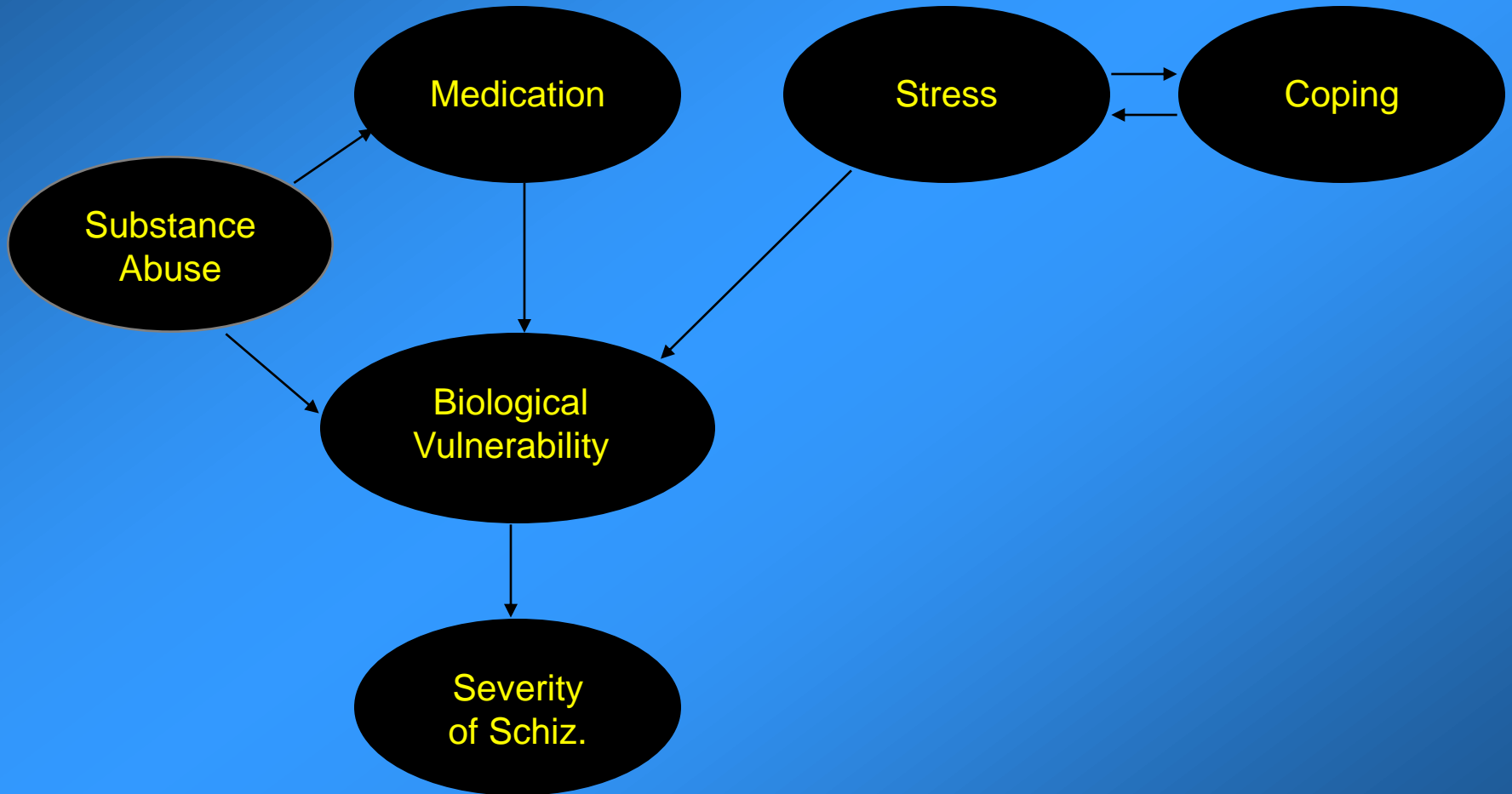
- Dysphoria common in schizophrenia, usually precedes onset of psychosis and persists throughout illness
- Some evidence linking trait dysphoria to substance abuse in schizophrenia
- Inconsistent findings suggesting link between depression and substance abuse in schizophrenia

# Super-sensitivity Model

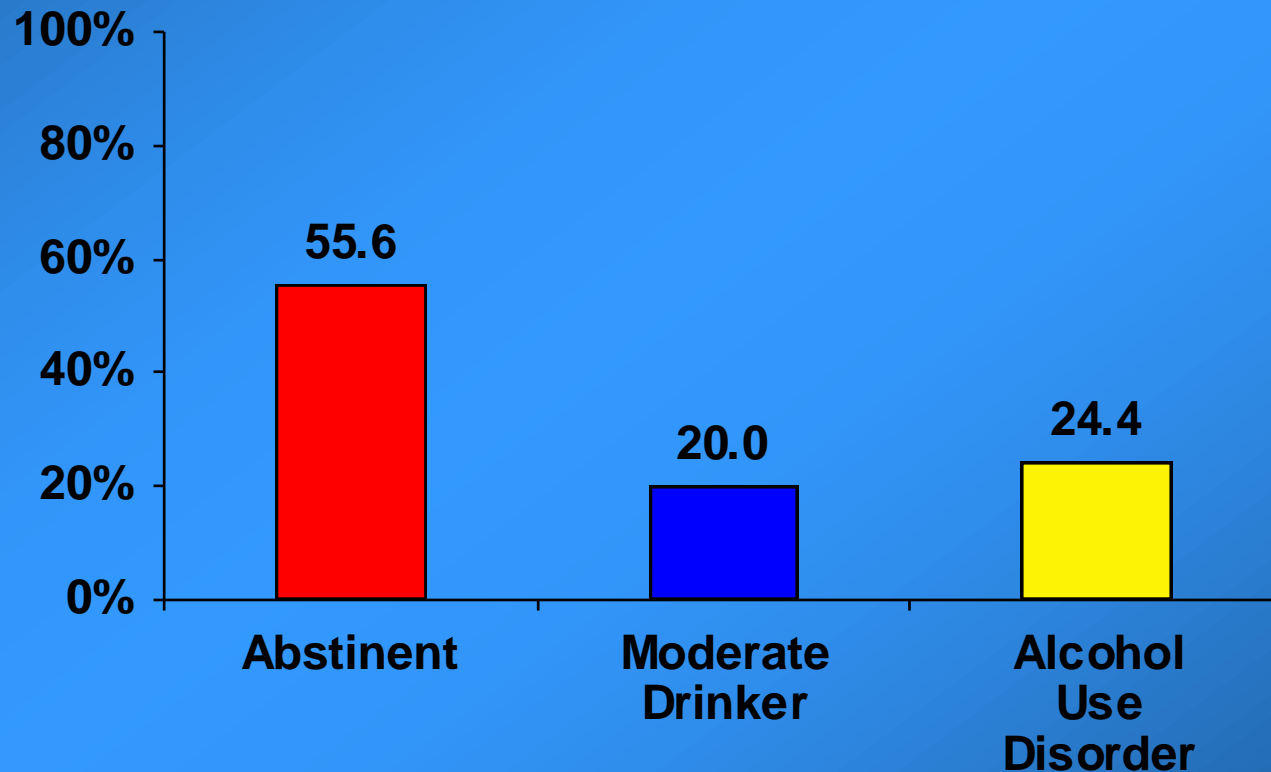
- ↓ Biological sensitivity increases vulnerability to effects of substances in schizophrenia
- ↓ Smaller amounts of substances result in problems
- ↓ “Normal” substance use is problematic for clients with schizophrenia but not in general population
- ↓ Sensitivity to alcohol and other substances, rather than high amounts of use, makes many clients with schizophrenia different from general population



# Stress-Vulnerability Model



# Status of Moderate Drinkers with Schizophrenia 4 - 7 Years Later (N=45)



Source: Drake & Wallach (1993)

# Support for Super-sensitivity Model

- ↓ People with schizophrenia less likely to develop physical dependence on substances
- ↓ Standard measures of substance abuse are less sensitive in clients with schizophrenia
- ↓ Clients are more sensitive to effects of small amounts of substances
- ↓ Few clients are able to sustain “moderate” use without impairment
- ↓ Super-sensitivity accounts for some increased comorbidity

# Secondary Psychosocial Effects Model

- Psychosocial consequences of schizophrenia increase vulnerability to substance abuse (limited research):
  - Cognitive impairment
  - Social extrusion
  - Poverty
  - Increased sensitivity to stress
  - Free time/no work, parenting responsibilities

# Common Factor Models

- Genetic vulnerability (not supported)
- Cognitive impairment (limited data)
- Social disadvantages (limited data)
- ASPD

# Antisocial Personality Disorder (ASPD)

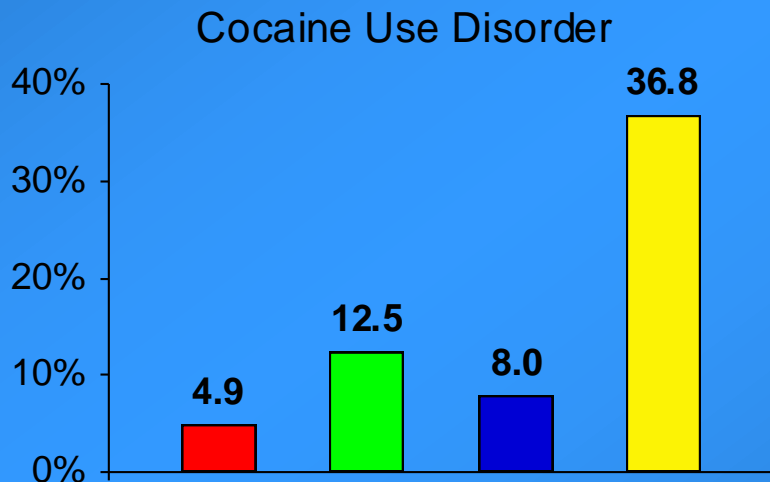
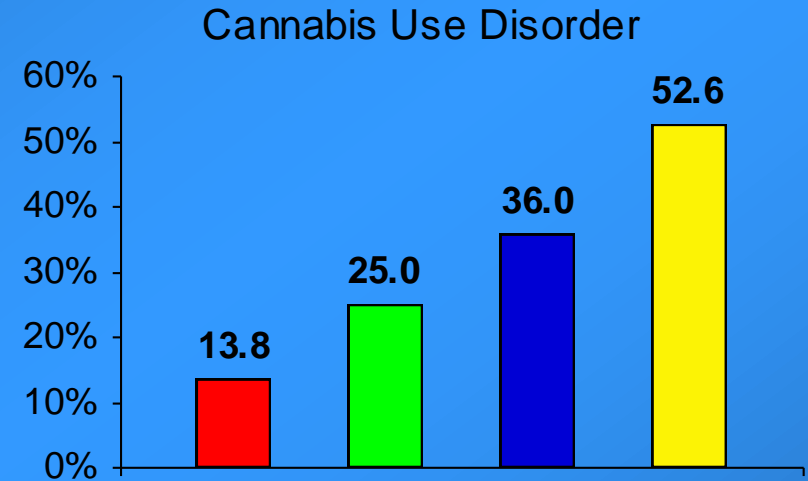
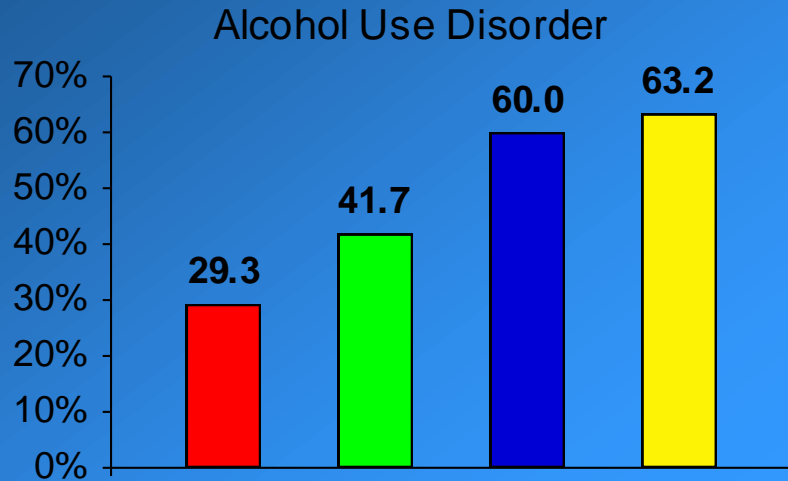
## Research

- Conduct Disorder (CD) and ASPD have high comorbidity with substance abuse
- CD often precedes onset of schizophrenia
- ASPD has high comorbidity with schizophrenia
- CD and ASPD have a high comorbidity with SUD in clients with schizophrenia
- Among dually diagnosed patients, CD and ASPD are associated with more severe SUD

## Conclusion

- ASPD is a common factor that may account for some increased comorbidity between schizophrenia and substance abuse

# CD, ASPD, and Recurrent Substance Abuse Disorders



N=293

- No ASPD/CD
- CD Only
- Adult ASPD Only
- Full ASPD

# Summary of Models of Comorbidity

- Secondary mental illness: limited support, but drug abuse may precipitate earlier age onset of schizophrenia in some vulnerable cases
- Secondary substance abuse: support for supersensitivity model; marginal support for dysphoria hypothesis
- Common factors: support for ASPD



# Treatment Barriers

- Historical division of service and training
- Sequential and parallel treatments
- Organizational and categorical funding barriers in the public sector
- Eligibility limits, benefit limits, and payment limits in the private sector

# Integrated Treatment

- Mental health and substance abuse treatment
  - ↓ Delivered concurrently
  - ↓ By the same team or group of clinicians
  - ↓ Within the same program
  - ↓ The burden of integration is on the clinicians

# Other Features of Dual Disorder Programs

- Assertive outreach
- Long-term commitment
- Comprehensive treatment
- Reduction of negative consequences
- Stage-wise treatment: engagement, persuasion, active treatment, and relapse prevention

# What are the Stages of Treatment?

1. Engagement, persuasion, active treatment, and relapse prevention
2. Not linear
3. Stage determines goals
4. Goals determine interventions
5. Multiple options at each stage

# What Do We Do During Engagement?

- **Goal**: To establish a working alliance with the client
- **Clinical Strategies**
  1. Outreach
  2. Practical assistance
  3. Crisis intervention
  4. Social network support
  5. Legal constraints

# What Do We Do During Persuasion?

- **Goal:** To motivate the client to address substance abuse as a problem
- **Clinical Strategies**
  1. Psychiatric stabilization
  2. “Persuasion” groups
  3. Family psychoeducation
  4. Rehabilitation
  5. Structured activity
  6. Education
  7. Motivational interviewing

# What Do We Do During Active Treatment?

- **Goal:**

- ↓ To reduce client's use/abuse of substance

- **Clinical Strategies**

1. Self-monitoring

2. Social skills training

3. Social network interventions

4. Self-help groups

5. Substitute activities

6. Close monitoring

7. Cognitive-behavioral techniques to address:

- ↓ High risk situations

- ↓ Craving

- ↓ Motives for substance use

  - ↓ Socialization

  - ↓ Persistent symptoms

  - ↓ Pleasure enhancement



# What Do We Do During Relapse Prevention?

- **Goals:**

- ↓ To maintain awareness of vulnerability and expand recovery to other areas

- **Clinical Strategies**

1. Self-help groups

2. Cognitive-behavioral and supportive interventions to enhance functioning in:

- ↓ Work, relationships, leisure activities, health, and quality of life

# Relapse Prevention Strategies

- Construction a relapse prevention plan:
  - Risky situations
  - Early warning signs
  - Immediate response
  - Social supports
  - Abstinence violation effect

# Research on Integrated Treatment (IT)

- 26+ RCT or quasi-experimental studies of IT (reviewed by Drake et al., 2004)
- 3/4 studies of brief motivational interviewing interventions showed positive effects
- 6/7 studies found group intervention better than 12-step or standard care

# Research on IT (Cont.)

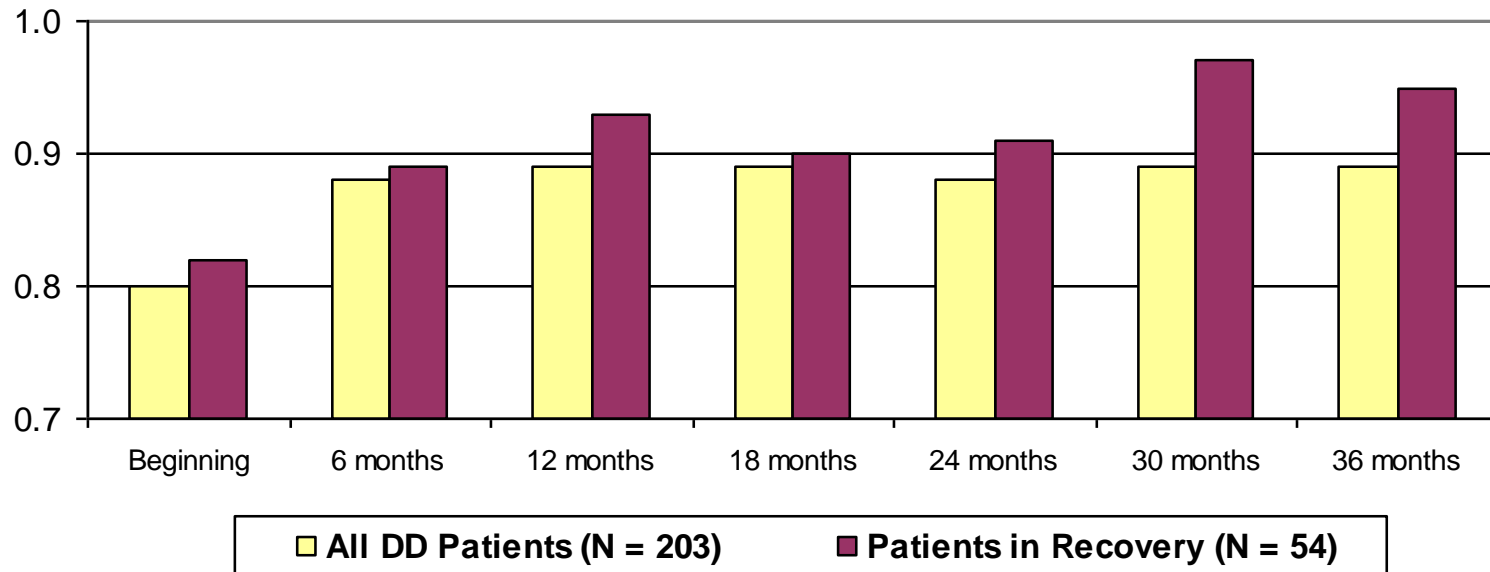
- Family intervention: no RCTs examining family treatment alone
- Comprehensive IT: 2 RCT & 1 quasi-exp. study favor comp. IT over treatment as usual
- Intensity: more intensive IT produces slightly better outcomes (e.g., Drake et al., 1998)

# Drake et al. (1998)

- 203 clients (77% schizophrenia)
- ACT vs. standard case management (SCM) (both IT)
- 3 year follow-up
- ACT better than SCM in alcohol severity & stage of treatment
- No differences in hospitalization, symptoms, quality of life

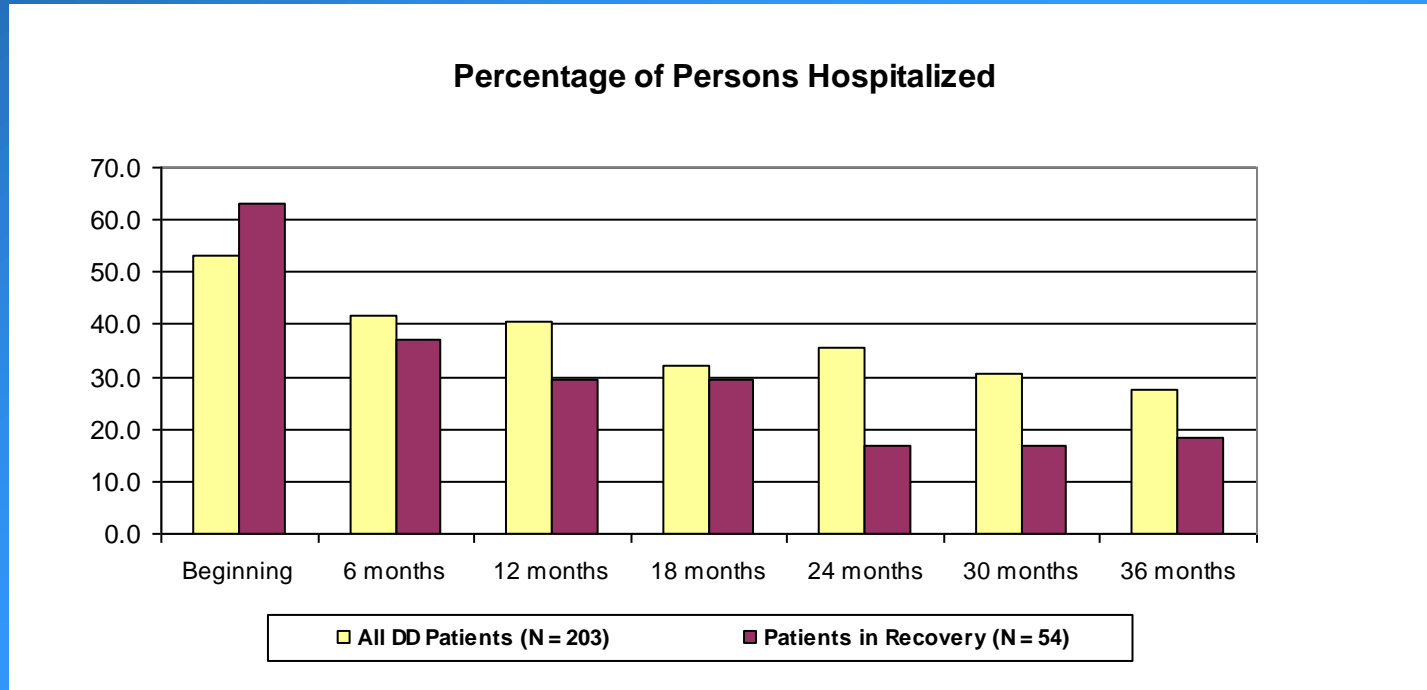
# NH Dual Diagnosis Study

Proportion of Days in Stable Community Housing



1. Proportion of days in stable community housing (regular apartment or house, not in hospital, jail, homeless setting or doubling with friends or family) increased for all dual diagnosis clients.
2. They increased more rapidly for persons in recovery (no substance abuse for at least 6 months).

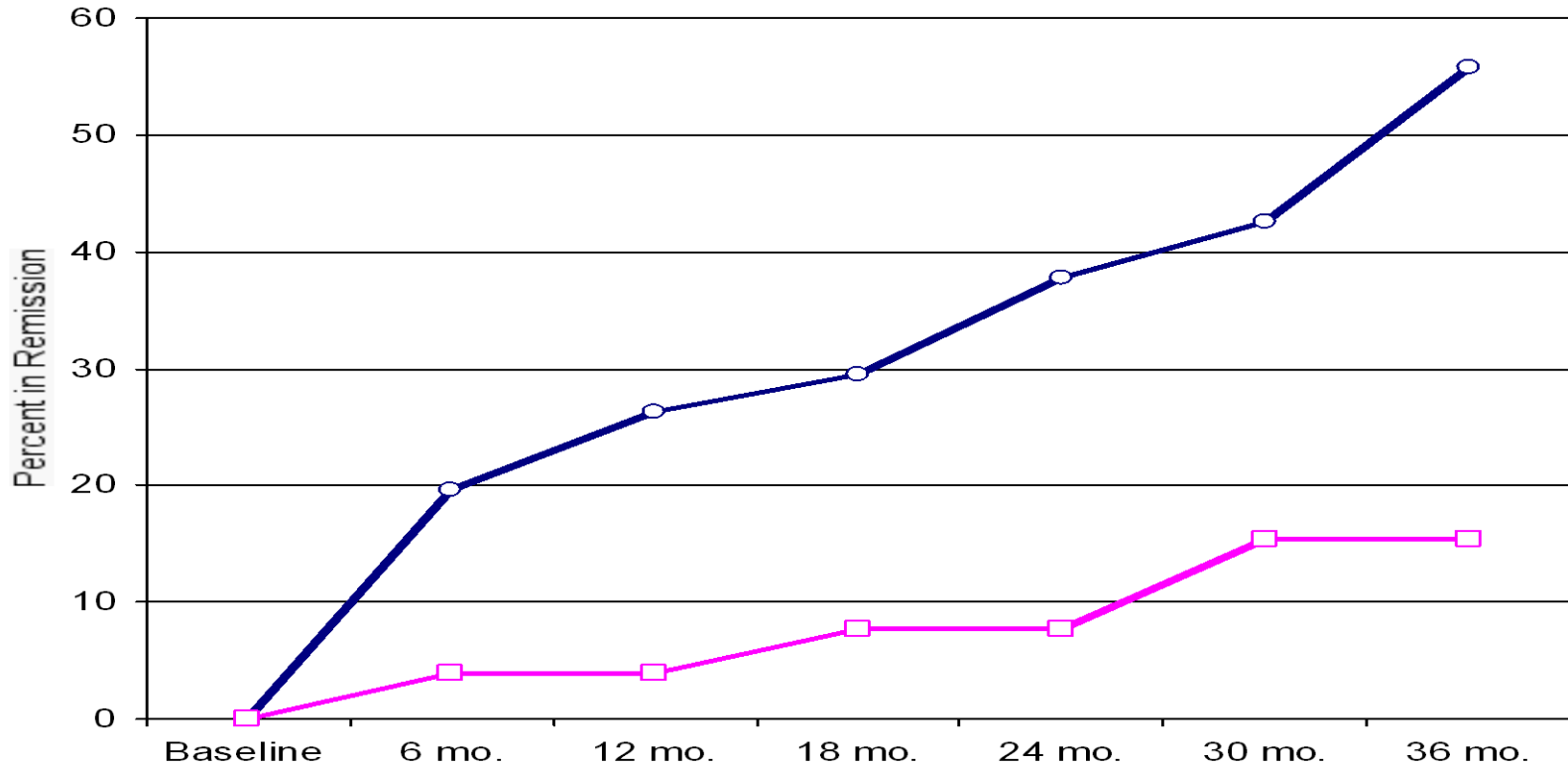
# NH Dual Diagnosis Study



1. Percentage of persons hospitalized during each six months declined significantly for all clients.
2. It declined much more for those in recovery.

# Fidelity to IT Model Improves Outcome

Figure 1. Percent of Participants in Stable Remission for High-Fidelity ACT Programs (E ; n=61) vs. Low-Fidelity ACT Programs (G; n=26).





# Limitations of Research

- Lack of standardization of treatments
- No or limited fidelity assessment
- No replication of program effects
- Unclear or variable comparison conditions

# Conclusions

- Substance use disorders are common in schizophrenia and contribute to worse outcomes
- Increased comorbidity is due partly to high sensitivity to effects of substances, and ASPD operating as a common factor increasing risk of each disorder
- Integrated treatment models treat both disorders concurrently, & employ motivation-based, comprehensive interventions
- Early research on integrated treatment provides evidence supporting its effects on improve substance abuse