

Approaches to Treatment of Youth with Opioid Addiction

Marc Fishman MD
Mountain Manor Treatment Center
Johns Hopkins University



What should we do with this case?

- 17 M
- Onset prescription opioids 15, progressing to daily use with withdrawal within 8 months
- Onset nasal heroin 16, injection heroin 6 months later
- 3 episodes residential tx, 2 AMA, 1 completed
- Buprenorphine treatment (monthly supply Rx x 4), took erratically, sold half
- Presents in crisis seeking detox (“Can I be out of here by Friday?”)

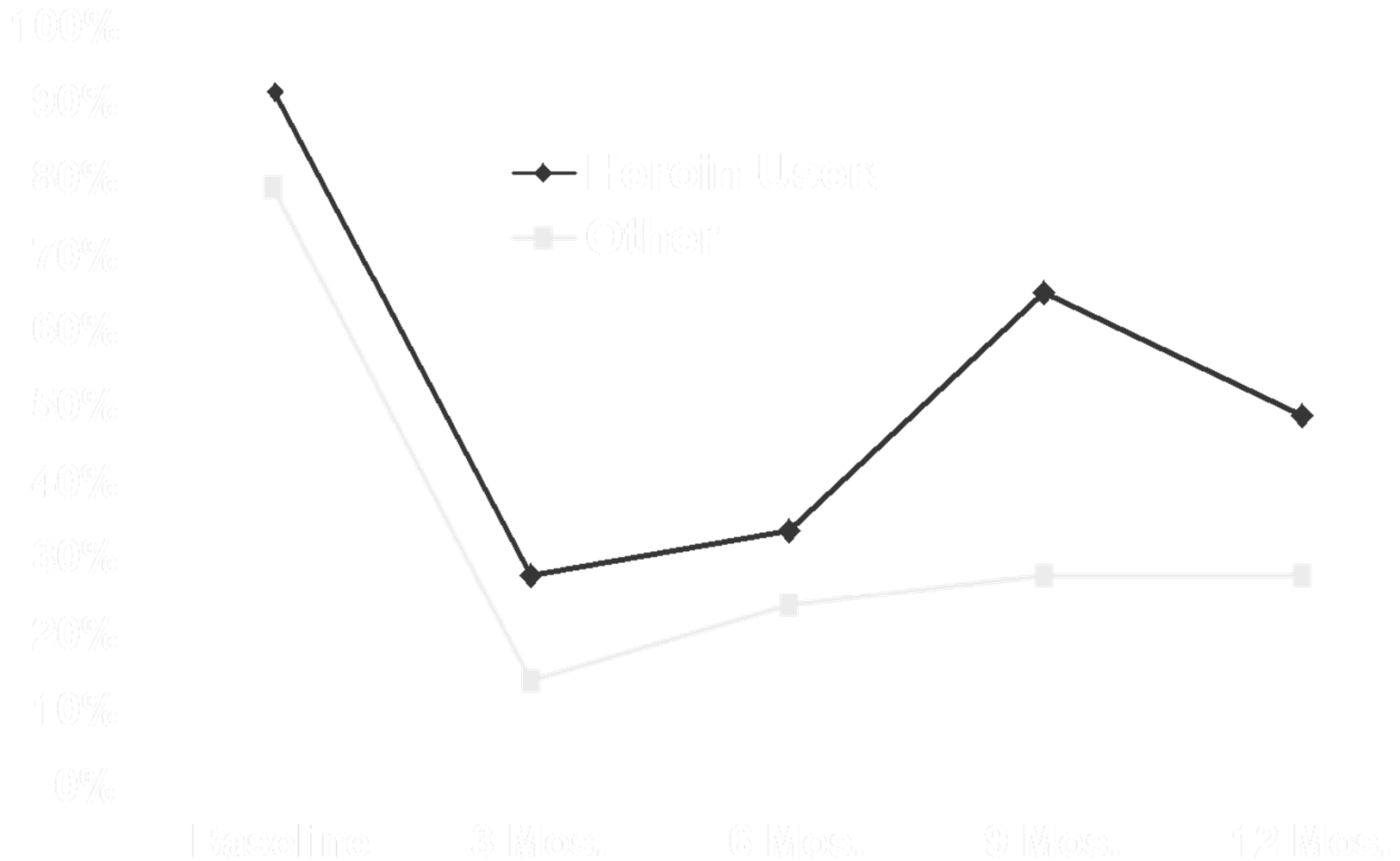
Youth opioid users

Clinical experience

- Higher severity and worse outcomes than non opioid using counterparts
- High rates of AMA from residential
- Low rates of continuing care in outpatient
- Relapse and drop out as the rule
- Alarming rates of overdose and death
- Lack of consensus and coherent approach
- Emergence of increasing “deep end” high severity, high chronicity population

ATM Baltimore Site Heroin Users vs Others

Substance using Days, Past 90



Conceptual underpinnings

One set of tools (among many)

- Use as many effective tools as are available
- One size does not fit all: as many doors as possible
- A full continuum of care: multiple services with flexible responses
- Institutional affiliation promotes engagement
- Expectation of relapsing/remitting course
- Expectation of variable and shifting treatment readiness
- Recovery as a gradual process, not an overnight event -- expectation of incremental progress

Elements of treatment model

- Emphasis on ongoing engagement from detox to next levels of care (the revolving door should lead somewhere)
- Specialty care
- Longitudinal follow-up and management
- Integration of relapse prevention medication *as standard of care*
 - Buprenorphine
 - Extended release naltrexone
- Co-occurring (dual diagnosis) treatment

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Extended vs Short-term Buprenorphine-Naloxone for Treatment of Opioid-Addicted Youth A Randomized Trial

George E. Woody, MD
Sabrina A. Poole, MS
Geetha Subramaniam, MD
Karen Dugosh, PhD
Michael Bogenschutz, MD
Patrick Abbott, MD
Ashwin Patkar, MD
Mark Publicker, MD
Karen McCain, MSN, FNP
Jennifer Sharpe Potter, PhD, MPH
Robert Forman, PhD
Victoria Vetter, MD
Laura McNicholas, MD, PhD
Jack Blaine, MD
Kevin G. Lynch, PhD
Paul Fudala, PhD

RECENT CONCERN HAS FOCUSED on opioid use among youth. For example, the proportion of 12th graders reporting past-year heroin use increased from 0.6% in 1992 to 0.9% in 2006. Similar increases occurred with pharmaceutical opioids—3.3% in 1992 to 9.5% in 2004¹—and recent data show that 13.4% of individuals aged 12 years or older who reported new use of heroin in the past 13 to 24 months meet criteria from the *Diagnostic and Statistical Manual of Mental Disorders* (Fourth Edition) (DSM-IV) for dependence.²

For editorial comment see p 2057.

Context The usual treatment for opioid-addicted youth is detoxification and counseling. Extended medication-assisted therapy may be more helpful.

Objective To evaluate the efficacy of continuing buprenorphine-naloxone for 12 weeks vs detoxification for opioid-addicted youth.

Design, Setting, and Patients Clinical trial at 6 community programs from July 2003 to December 2006 including 152 patients aged 15 to 21 years who were randomized to 12 weeks of buprenorphine-naloxone or a 14-day taper (detox).

Interventions Patients in the 12-week buprenorphine-naloxone group were prescribed up to 24 mg per day for 9 weeks and then tapered to week 12; patients in the detox group were prescribed up to 14 mg per day and then tapered to day 14. All were offered weekly individual and group counseling.

Main Outcome Measure Opioid-positive urine test result at weeks 4, 8, and 12.

Results The number of patients younger than 18 years was too small to analyze separately, but overall, patients in the detox group had higher proportions of opioid-positive urine test results at weeks 4 and 8 but not at week 12 ($\chi^2=4.93$, $P=.09$). At week 4, 59 detox patients had positive results (61%; 95% confidence interval [CI]=47%-75%) vs 58 12-week buprenorphine-naloxone patients (26%; 95% CI=14%-38%). At week 8, 53 detox patients had positive results (54%; 95% CI=38%-70%) vs 52 12-week buprenorphine-naloxone patients (23%; 95% CI=11%-35%). At week 12, 53 detox patients had positive results (51%; 95% CI=35%-67%) vs 49 12-week buprenorphine-naloxone patients (43%; 95% CI=29%-57%). By week 12, 16 of 78 detox patients (20.5%) remained in treatment vs 52 of 74 12-week buprenorphine-naloxone patients (70%; $\chi^2=32.90$, $P<.001$). During weeks 1 through 12, patients in the 12-week buprenorphine-naloxone group reported less opioid use ($\chi^2=18.45$, $P<.001$), less injecting ($\chi^2=6.00$, $P=.01$), and less nonstudy addiction treatment ($\chi^2=25.82$, $P<.001$). High levels of opioid use occurred in both groups at follow-up. Four of 83 patients who tested negative for hepatitis C at baseline were positive for hepatitis C at week 12.

Conclusions Continuing treatment with buprenorphine-naloxone improved outcome compared with short-term detoxification. Further research is necessary to assess the efficacy and safety of longer-term treatment with buprenorphine for young individuals with opioid dependence.

Trial Registration clinicaltrials.gov Identifier: NCT00078130

JAMA. 2008;300(17):2003-2011

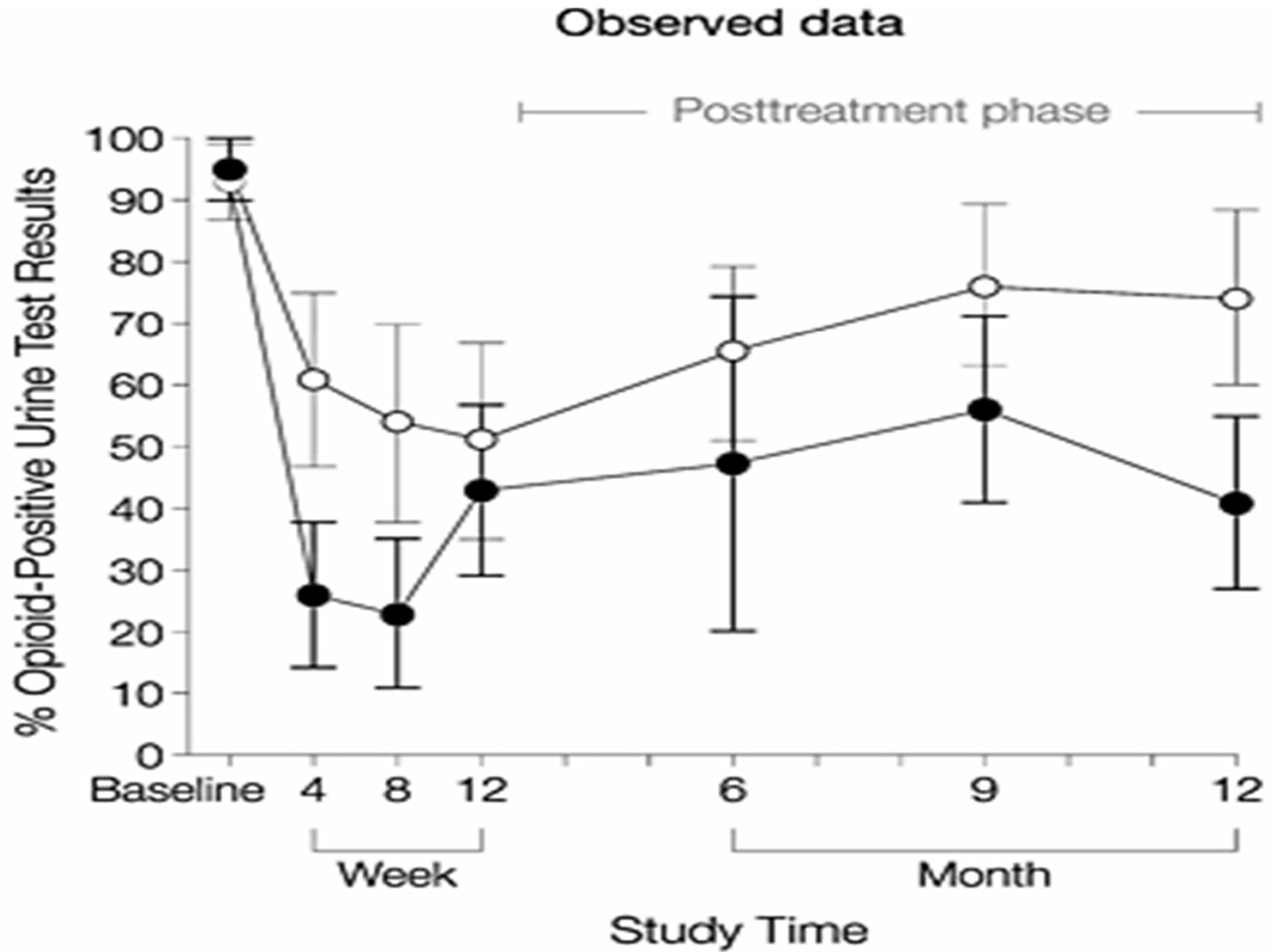
www.jama.com

The usual treatment for opioid-addicted youth is short-term detoxification and individual or group therapy in residential or outpatient settings over

Author Affiliations are listed at the end of this article.
Corresponding Author: George E. Woody, MD, Department of Psychiatry, Treatment Research Institute, University of Pennsylvania, 150 S Independence Mall W, Ste 600, Philadelphia, PA 19106 (woody@research.ori.org).

CTN Youth Buprenorphine Study

Opioid Positive Urines: 12 weeks Bup vs Detox



Treatment of opioid dependence in adolescents and young adults with extended release naltrexone: preliminary case-series and feasibility

Marc J. Fishman^{1,2}, Erin L. Winstanley^{3,4}, Erin Curran^{1,2}, Shannon Garrett² & Geetha Subramaniam^{1,2}

Johns Hopkins University School of Medicine, Department of Psychiatry and Behavioral Sciences, MD, USA,¹ Mountain Manor Treatment Center, MD, USA,² University of Cincinnati College of Medicine, Department of Psychiatry, OH, USA³ and Lindner Center of HOPE, OH, USA⁴

- 20 youth received xr-ntx
- 16 initiated OP treatment
- 10 retained at 4 months
- 9 “good outcome”

If only it were that easy



bob

"We found this in your brain."

Residential Admission: Detox

- 7d standardized detox protocol
 - Suboxone, max 12mg daily
 - First dose when symptomatic/in withdrawal
- During 7 d detox lay groundwork for next step of treatment
 - Detox/residential stay is NOT at CURE
 - first battle in a long war
 - Engage/transition into outpatient treatment

Detox Issues

- Asleep or awake?
- Aggressive symptom management
 - Diarrhea/constipation, aches & chills, anxiety, insomnia
- Where will they live after residential
- Verifying insurance coverage
 - Impacts both inpt/resid care & planning for aftercare

Buprenorphine induction method

- Residential detox using bupe taper
- Interruption of taper, switch to steady dose, or
- Completion of taper, later resume bupe
- Alternative induction as outpatient (minority)
- Outpatient maintenance

Ryan

- 19 M injection heroin, multiple treatments
- Does well during IOP, with structure of recovery house
- Typical pattern of relapse after high intensity treatment, after leaving structured environment
- Buprenorphine treatment for the first time gives him a link to continuing care and a bridge out of recovery house
- Abstinent 15 months, back home with parents, back at college

XR-NTX Induction

- Residential detox using bupe taper
- 7 day opioid washout by confinement
- NTX induction with 4 d oral dose titration
 - 6.25, 12.5, 25, 50 mg
- 1st dose injectable XR-NTX prior to residential discharge
- Outpatient maintenance

Brittany

- 15 yo WF
- 1 yr hx prescription opioids, recent progression to injection heroin, parents didn't know extent of dependence, shocked to discover a needle
- Parents compelled by idea of XR-NTX

Choice of medication: Bupe vs XR-NTX

- Patient preference
- Family preference
- Failure of other treatments, try something new
- Side effects, anxious anticipation
- Long acting duration of xr-ntx for poor treatment engagement and adherence
- Bupe intrinsically reinforcing
- More familiarity with bupe, pos and neg reputation
- Problems with acceptability of agonist pharmacotherapies
- More tools in the toolbox

Jennifer

- 17 yo from the suburbs, injection heroin x 2 years, 3rd episode detox
- Uses street bupe intermittently
- Strong parental and juvenile justice pressures, ambivalent about quitting
- “If I wake up & there is heroin & suboxone on the table -- I’ll use heroin every time”
- Agrees to trial of XR-NTX

What's the active ingredient?

- Question:
Which is better –
medications or counseling or meetings?
- Answer:
Yes

Encouraging MAR/MAT

- Battling myths and untruths
 - I will still have cravings
 - I will be “addicted to something else”
 - I hate needles
 - Suboxone makes you sick, I need subutex
 - NTX makes you sick
 - NTX puts you in withdrawal
 - You can die on NTX/XR-NTX

Continuing care

- Start daily administration for bupe, increase duration of Rx duration over time, used as contingency management
- Monthly injections for xr-ntx
- Expectation of counseling attendance
- Opioid-specific group
- Frequent urine monitoring

Features of youth treatment

- Family leverage
- Pushback against sense of parental dependence and restriction
- Salience of burdens of treatment
- Prominence of co-morbidity
- Family mobilization – “Medicine may help with the receptors, you still have to parent your difficult teenager”

Chloe

- 18 F onset injection heroin 16, occasional street suboxone
- Outpatient suboxone maintenance but would take it only intermittently when heroin unavailable
- Clarified goal: not ready to quit, suboxone stopped but MET continued
- 2 months later Rx restarted under mother's supervision with new commitment --> 6 months abstinence

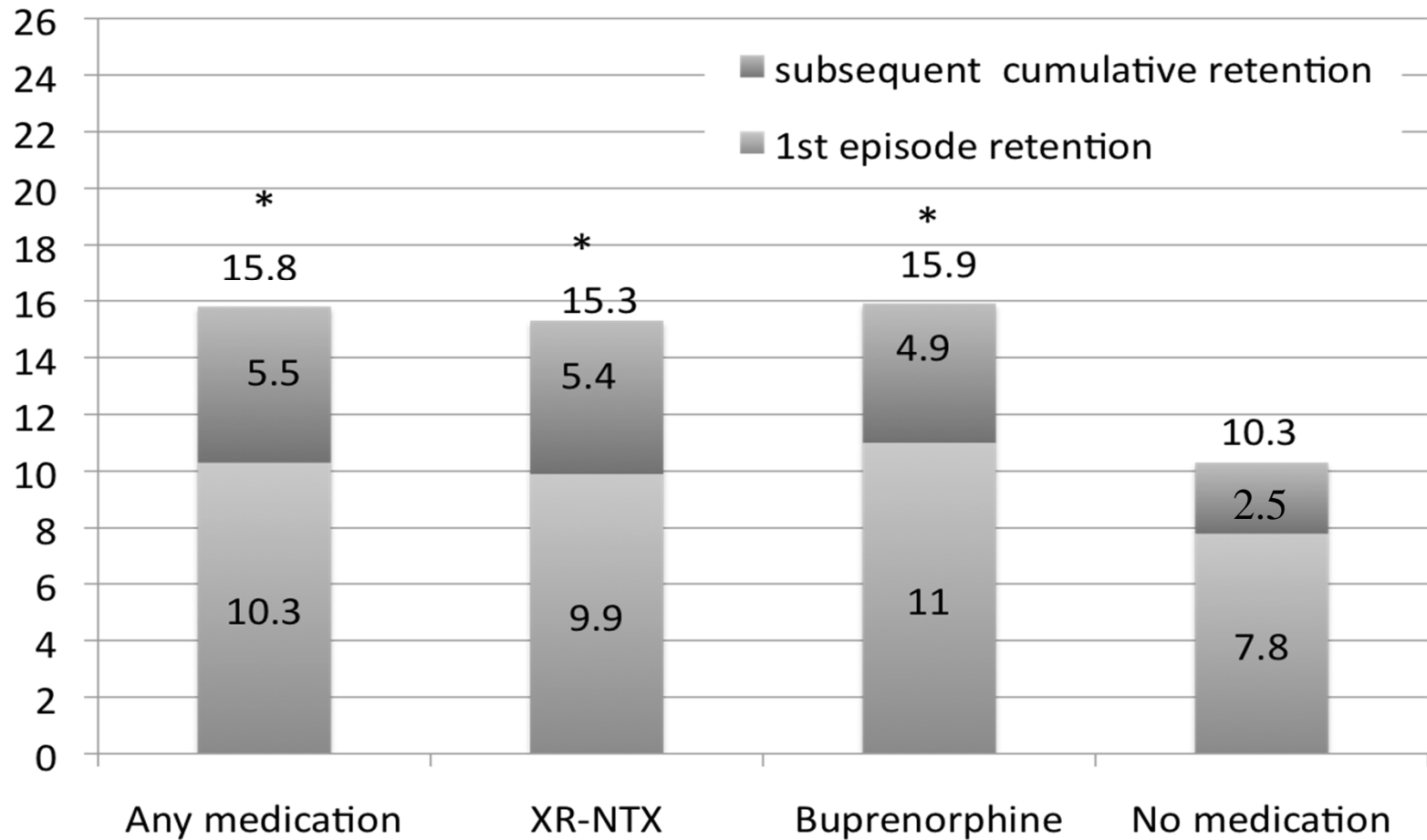
Matthew

- 19 M, 3 yr hx injection heroin
- 4 previous episodes detox, 2 previous episodes of failure with bupe outpt treatment
- Wants to try bupe again
- Parents make XR-NTX a condition of returning home

Greg

- 16 M prescription opioid dependence
- Residential detox, XR-NTX induction
- Abstinent x 3 months
- Family vacation, out of town, dose #4 delayed
- While at beach started deliberate plan to use, diverting few dollars at a time to prevent detection
- On return, told parents he was headed to treatment, went to get drugs instead, missed XR-NTX
- Relapse x 3 weeks
- Brief residential detox
- Restart XR-NTX with new level of parental involvement

Cumulative retention over 26 weeks by medication

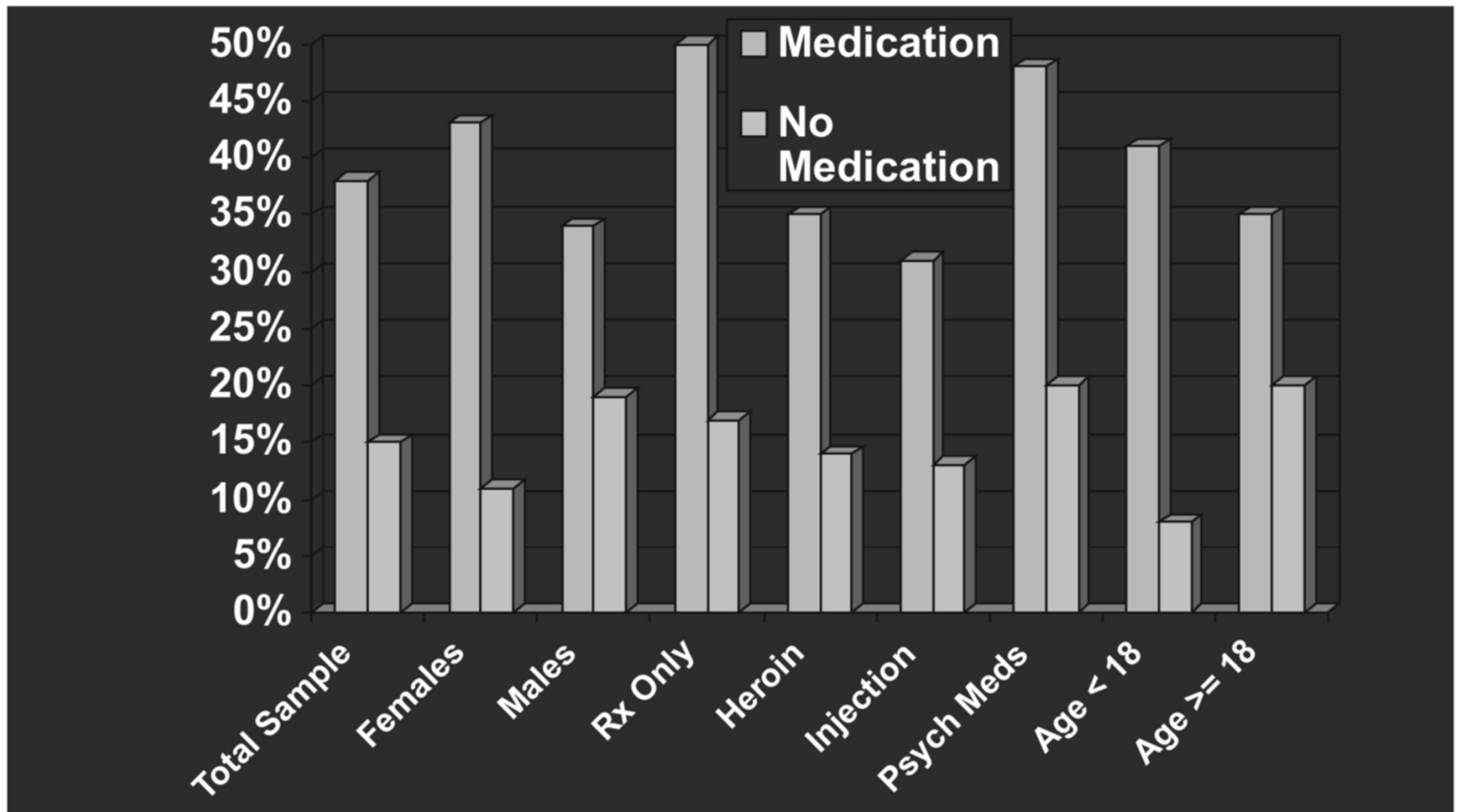


* = $p < 0.01$ compared to no medication

Additional Factors

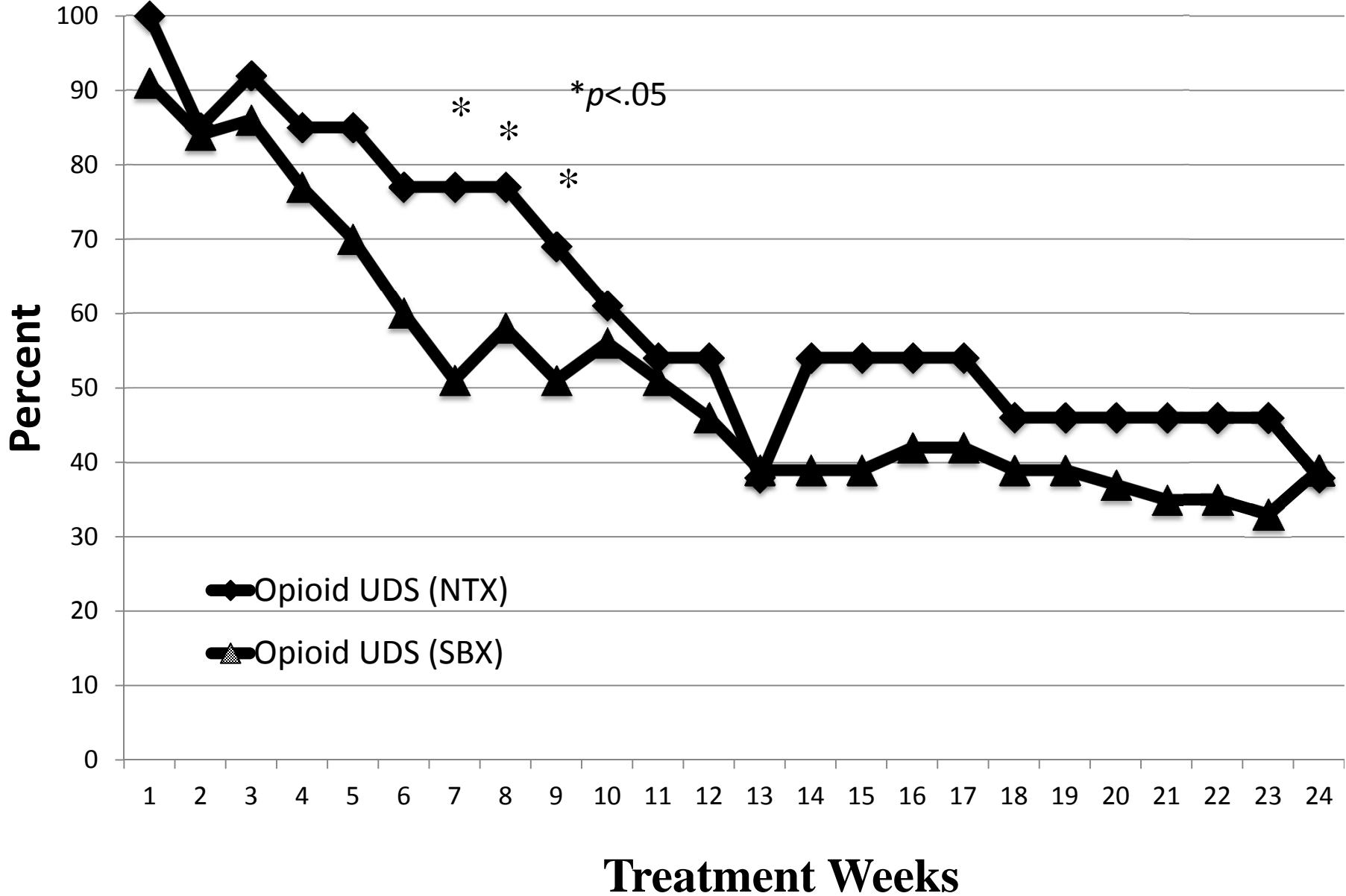
Medication vs. No Medication

Cross-sectional retention at 26 weeks



Young adults

Opioid Negative UDS (absent imputed as pos)



Maintaining credibility in the real world: Medications, mischief, and monkey business

- Side effects
- Diversion
- Non-compliance
- Inconsistency
- Other substances
- Conflicting messages

Prepare for discrepancy and stigma

- How to talk to family
- How to talk to others in the 12 step fellowship
- How to shop for meetings and sponsors
- Don't ask, don't tell?

Sarah

- 18 F injection heroin, multiple failed treatments
- Inpatient treatment, recovery house, continuation suboxone
- Made connection to NA for the first time
- Abstinent x 6 months
- Told at NA meeting “not really clean” → stopped Rx
- Relapse
- 6 months later back on suboxone
- New stance towards Rx “don’t ask, don’t tell”
- 2 years abstinence

Additional adherence enhancements

- Long acting formulations
- Increased intensity / frequency of provider monitoring
- Increased coordination and communication between medical and counseling staff
- Role of concerned other in monitoring of adherence (eg network therapy)
- Supervised administration by caregiver or staff
- Prescriptions left for counselor to distribute
- Direct med administration up to daily

Psychiatric co-morbidity

- Co-occurring disorders nearly universal
- Concurrent psychiatric treatment essential

Future directions

- Increased family involvement and responsibility
- Assertive outreach
- Home delivery of XR-NTX
- Longer term residential support

A sprint or a marathon?

Early: I agree I was out of control with the dope, but I can still use a little oxy on the weekends.

Middle: I'm an opioid addict, not an alcoholic. I just need to stop using heroin (and pills). A few beers is fine.

Later: When I get drunk, I end up using heroin again. Maybe I need to stop drinking too. But taking a little xanax when I'm stressed is no big deal. And MJ isn't really a drug anyway...

(sigh)

We've come a long way...



But we have a long way to go.