



Observational study of the long-term efficacy of ibogaine-assisted treatment in participants with opiate addiction

Tom Kingsley Brown, PhD (UCSD), Valerie Mojeiko (MAPS),
Karim Rishi Gargour (CIIS), and Meg Jordan, PhD, RN (CIIS)

Sponsored by: MAPS

Can ibogaine treatment facilitate long-term recovery from addiction?



Outline

- I. Previous research on ibogaine treatment for substance dependence
- II. MAPS research design and current status
- III. Preliminary results
- IV. A call to collective research efforts

Evidence for Efficacy

- ✓ A plethora of anecdotal evidence
 - **3,414 documented cases of ibogaine-assisted treatment through 2006** (K. Alper, H. Lotsof, and C. Laughlin (2008) *J. Ethnopharmacol.* 115 (1): 9-24)
 - **Treatments by Lotsof, addict self-help groups in the Netherlands and in New York City, and providers such as Eric Taub** (K. Alper, D. Beal, and C. Kaplan (2001) A Contemporary History of Ibogaine in the United States and Europe. *The Alkaloids* 56: 249-282)
- ✓ **Animal studies show that it greatly reduces craving, withdrawal** (*e.g.* S.D. Glick, M.E. Kuehne, J. Raucci (1994) *Brain Res.* 657: 14-22)

- ✓ Evidence from clinical studies (K. Alper, 2009 DPA Conference, Albuquerque, NM)
 - Complete resolution of withdrawal symptoms in 29 of 33 subjects (Alper, Lotsof, Fremken, Luciano, and Bastiaans, Am J Addict 1999 (8): 234-242)
 - In 27 cocaine- or heroin-addicted patients, “self-reported depression symptoms and craving were significantly decreased” at 1 month after ibogaine treatment (St Kitts study, D. Mash *et al.*, Ann N Y Acad Sci. 2000 (914): 394-401)
- Lacking good data on long-term efficacy

MAPS Ibogaine Outcomes Study

IOA-3

Protocol Design and Current Status

Primary Objective:

...to determine the effectiveness of ibogaine-assisted therapy in producing extended periods of opiate drug-use abstinence, in reducing opiate drug use, and in improving associated impacts of these behaviors as measured by the Addiction Severity Index Lite (ASI-Lite) composite scores over a period of 12 months following therapy.



Tabernatha iboga
from "Plants of the Gods"
by Schultes and Hofmann



Primary Objective:

...to determine the effectiveness of ibogaine-assisted therapy in producing extended periods of opiate drug-use abstinence...

(Measure: length of time from treatment until first relapse)



Tabernatha iboga
from "Plants of the Gods"
by Schultes and Hofmann



Primary Objective:

...in reducing opiate drug use...

(Measure and Compare: frequency and dosage of opiate use at baseline and at each monthly follow-up for 12 months)



Tabernatha iboga
from "Plants of the Gods"
by Schultes and Hofmann



Primary Objective:

...and in improving associated impacts of these behaviors as measured by the Addiction Severity Index Lite (ASI-Lite) composite scores over a period of 12 months following therapy.



Tabernatha iboga
from "Plants of the Gods"
by Schultes and Hofmann



ALCOHOL/DRUGS

Route of Administration Types:

1. Oral 2. Nasal 3. Smoking 4. Non-IV injection 5. IV

* Note the usual or most recent route. For more than one route, choose the most severe. The routes are listed from least severe to most severe.

	Past 30 Days	Lifetime (years)	Route of Admin
D1 Alcohol (any use at all)	00	00	3
D2 Alcohol (to intoxication)	00	00	3
D3 Heroin	20	01	5
D4 Methadone	00	00	N
D5 Other Opiates/Analgesics	00	02	1
D6 Barbiturates	00	00	N
D7 Sedatives/Hypnotics/Tranquilizers	00	00	N
D8 Cocaine	01	00	2
D9 Amphetamines	00	00	N
D10 Cannabis	04	04	3
D11 Hallucinogens	00	00	N
D12 Inhalants	00	00	N
D13 More than 1 substance per day (including alcohol)	01	02	3

D17. How many times have you had Alcohol DT's? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

* Delirium Tremens (DT's): Occur 24-48 hours after last drink, or significant decrease in alcohol intake, shaking, severe disorientation, fever, hallucinations, they usually require medical attention.

ALCOHOL/DRUGS COMMENTS

(Include question number with your notes)

heroin 21 g. - 1 1/2 g /
20 days
Started June 2011

Oxy contin 80-16
Apr 1 / May 1
Roxycodone } 80-1
Oxycodone }

1/4 g.

Smoking pot
1/8 oz - 1/4 oz
Cyril - 1 yr ago

ALCOHOL/DRUGS (cont.)

How many times in your life have you been treated for :

D19* Alcohol abuse? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

D20* Drug abuse? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

* Include detoxification, halfway houses, in/outpatient counseling, and AA or NA (if 3+ meetings within one month period).

How many of these were detox only:
D21 Alcohol? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

D22 Drugs? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

* If D19 = "00", then question D21 is "NN"
If D20 = "00", then question D22 is "NN"

How much money would you say you spent during the past 30 days on:

D23 Alcohol? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

D24 Drugs? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

* Only count actual money spent. What is the financial burden caused by drugs/alcohol?

D25 How many days have you been treated as an outpatient for alcohol or drugs in the past 30 days? *Include AA/NA 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

For Questions D28-D31, ask the patient to use the Patient Rating scale. The patient is rating the need for additional substance abuse treatment.

How many days in the past 30 have you experienced:
D26 Alcohol problems? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

How troubled or bothered have you been in the past 30 days by these
D28 Alcohol problems? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

How important to you now is treatment for these:
D30 Alcohol problems? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

How many days in the past 30 have you experienced:
D27 Drug problems? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

* Include only: Craving, withdrawal symptoms, disturbing effects of use, or wanting to stop and being unable to.

How troubled or bothered have you been in the past 30 days by these
D29 Drug problems? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

How important to you now is treatment for these:
D31 Drug problems? 0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

CONFIDENCE RATINGS

Is the above information significantly distorted by:

D34 Patient's misrepresentation? 0-No 1-Yes 0 1

D35 Patient's inability to understand? 0-No 1-Yes 0 1

ALCOHOL/DRUGS COMMENTS

(Include question number with your notes)

no ODS

Suboxone from Dr. -
made him feel like
a zombie

seventy rhg 7

ASI -Lite Sections

1. Medical Status
2. Employment / Support Status
3. Drug/Alcohol Use
4. Legal Status
5. Family/Social Relationships
6. Psychiatric Status

FAMILY/SOCIAL RELATIONSHIPS

F1. Marital Status:
 1-Married 3-Widowed 5-Divorced
 2-Remarried 4-Separated 6-Never Married
 • Common-law marriage = 1. Specify in comments.

F3. Are you satisfied with this situation?
 0-No 1-Indifferent 2-Yes
 • Satisfied = generally liking the situation. - Refers to Questions F1 & F2.

F4. Usual living arrangements (past 3 years):
 1-With sexual partner & children 6-With friends
 2-With sexual partner alone 7-Alone
 3-With children alone 8-Controlled Environment
 4-With parents 9-No stable arrangement
 5-With family
 • Choose arrangements most representative of the past 3 years. If there is an even split in time between these arrangements, choose the most recent arrangement.

F6. Are you satisfied with these arrangements?
 0-No 1-Indifferent 2-Yes

Do you live with anyone who:

F7. Has a current alcohol problem? 0-No 1-Yes

F8. Uses non-prescribed drugs? 0-No 1-Yes

F9. With whom do you spend most of your free time? 1-Family 2-Friend
 Alone
 • If a girlfriend/boyfriend is considered as family by patient, then they must refer to them as family throughout this section, not a friend.

F10. Are you satisfied with spending your free time this way? 0-No 1-Indifferent 2-Yes
 • A satisfied response must indicate that the person generally likes the situation. Referring to Question F9.

Have you had significant periods in which you have experienced serious problems getting along with:
 0- No 1- Yes
 Past 30 days In Your Life

F18. Mother	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F19. Father	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F20. Brother/Sister	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F21. Sexual Partner/Spouse	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F22. Children	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F23. Other Significant Family (specify)	<input type="checkbox"/>	<input type="checkbox"/>
F24. Close Friends	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F25. Neighbors	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
F26. Co-workers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

• "Serious problems" mean those that endangered the relationship.
 • A "problem" requires contact of some sort, either by telephone or in person.

Did anyone abuse you? 0- No 1-Yes
 Past 30 days In Your Life

F28. Physically?
 • Caused you physical harm.

F29. Sexually?
 • Forced sexual advances/acts.

FAMILY/SOCIAL COMMENTS (include question number with your notes)

Getting married soon

F7
 make alcoholic

Girlfriend

- Father never in his life

- younger brother

F21 l/c of the drug

Secondary Objectives:

- 1) to investigate: are changes in ASI scores after treatment related to subjective intensity of the experience? (States of Consciousness Questionnaire)
- 2) using Subjective Opiate Withdrawal Scale (SOWS), to see if ibogaine treatment reduces withdrawal symptoms



Looking back on your extended session you have just experienced, please rate the degree to which at any time during the session, you have experienced the following phenomena, In making each of your ratings, use the following scale:

- 0 - none; not at all
- 1 - so slight cannot decide
- 2 - slight
- 3 - moderate
- 4 - strong (equivalent in degree to any previous strong experience or expectation of this description)
- 5 - extreme, (more than ever before in my life and stronger than 4)

Please feel free to write informative or clarifying after any of the items in this questionnaire. If part of an item applies more to your experience than another part, please underline the part that applies.

- 4 1. Visions of abstract geometric patterns of colored lines.
- 5 2. Loss of your usual sense of time.
- 3 3. Feeling that the consciousness experienced during part of the session was more real than your normal awareness of everyday reality.
- 0 4. Feelings of anger or aggression.
- 5 5. Experience of amazement.
- 3 6. Sense that the experience cannot be described adequately in words.
- 5 7 Sense of passing through stages in evolution.
- 5 8. Sense of the limitations and smallness of your everyday personality in contrast to the Infinite.
- 5 9. Gain of insightful knowledge experienced at an intuitive level.
- 5 10. Experience of overflowing energy.
- 0 11. Visions of sexual organs (genitalia, breasts)
- 5 12. Feelings that you experienced eternity or infinity.
- 4 13. Emotional and/or physical suffering.
- 1 14. Experience of oneness or unity with objects and/or persons perceived in your

Assessment of Withdrawal from Opioids

The Subjective Opiate Withdrawal Scale (SOWS)

Name ~~XXXXXXXXXX~~ Date 7/10/11 Time 8:51

		PLEASE SCORE EACH OF THE 16 ITEMS BELOW ACCORDING TO HOW YOU FEEL NOW (CIRCLE ONE NUMBER)				
	SYMPTOM	NOT AT ALL	A LITTLE	MODERATELY	QUITE A BIT	EXTREMELY
1	I feel anxious	0	1	2	3	4
2	I feel like yawning	0	1	2	3	4
3	I am perspiring	0	1	2	3	4
4	My eyes are teary	0	1	2	3	4
5	My nose is running	0	1	2	3	4
6	I have goosebumps	0	1	2	3	4
7	I am shaking	0	1	2	3	4
8	I have hot flushes	0	1	2	3	4
9	I have cold flushes	0	1	2	3	4
10	My bones and muscles ache	0	1	2	3	4
11	I feel restless	0	1	2	3	4
12	I feel nauseous	0	1	2	3	4
13	I feel like vomiting	0	1	2	3	4
14	My muscles twitch	0	1	2	3	4
15	I have stomach cramps	0	1	2	3	4
16	I feel like using now	0	1	2	3	4

Range 0-64. Handelsman, L., Cochrane, K. J., Aronson, M. J. et al. (1987)
Two New Rating Scales for Opiate Withdrawal, *American Journal of Alcohol Abuse*, 13, 293-308.

Assessment of Withdrawal from Opioids

The Subjective Opiate Withdrawal Scale (SOWS)

Name ~~XXXXXXXXXX~~ Date 7/12/11 Time 2

		PLEASE SCORE EACH OF THE 16 ITEMS BELOW ACCORDING TO HOW YOU FEEL NOW (CIRCLE ONE NUMBER)				
	SYMPTOM	NOT AT ALL	A LITTLE	MODERATELY	QUITE A BIT	EXTREMELY
1	I feel anxious	0	1	2	3	
2	I feel like yawning	0	1	2	3	
3	I am perspiring	0	1	2	3	
4	My eyes are teary	0	1	2	3	
5	My nose is running	0	1	2	3	
6	I have goosebumps	0	1	2	3	
7	I am shaking	0	1	2	3	
8	I have hot flushes	0	1	2	3	
9	I have cold flushes	0	1	2	3	
10	My bones and muscles ache	0	1	2	3	
11	I feel restless	0	1	2	3	
12	I feel nauseous	0	1	2	3	
13	I feel like vomiting	0	1	2	3	
14	My muscles twitch	0	1	2	3	
15	I have stomach cramps	0	1	2	3	
16	I feel like using now	0	1	2	3	

Range 0-64. Handelsman, L., Cochrane, K. J., Aronson, M. J. et al. (1987)
Two New Rating Scales for Opiate Withdrawal, *American Journal of Alcohol Abuse*, 13, 293-308.

Secondary Objectives:

- 3) to determine the effectiveness of ibogaine-assisted therapy in producing extended periods of relief from depression using the Beck Depression Inventory
- 4) to track changes in Emotional Intelligence (using the Trait Emotional Intelligence Questionnaire, Short Form (TEIQue-SF) to observe concomitants of possible relapse into substance use.



Study Design

- *Enroll and Follow 30 subjects for one year post-treatment (ASI before treatment + monthly for 12 months after treatment)
- *Clinics in Baja California, Mexico
- *Initial (enrollment / baseline) interview in person or video Skype, additional interviews by phone
- *Inclusion/Exclusion Criteria

Study Design

*Secondary measures:

>SOWS 1x before and 1x after treatment

>SOCQ and Brief Description after treatment

*Control group of people who come to clinic but are denied treatment for medical reasons

Study Design

*Compensation--\$10 per monthly “visit”

*Calls with Significant Other (monthly)

*Drug Testing (2x hair (preferred) or 3x urine)
(subject compensated \$55 / \$35 per test)

Other Secondary Measures: baseline and monthly

*Beck Depression Inventory

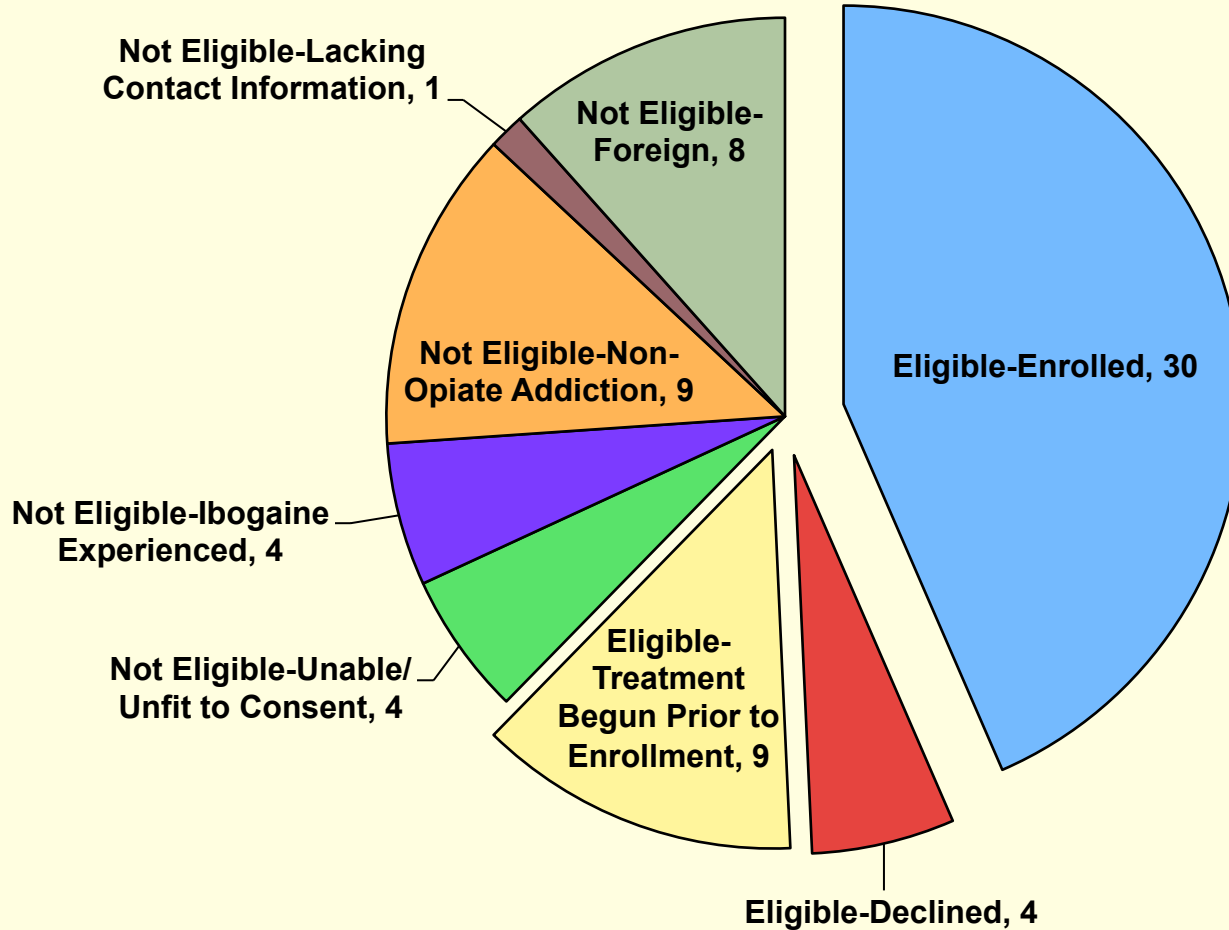
*Test of Emotional Intelligence Questionnaire,
Short Form (TEIQuie-SF)

Current Status

- 30th and final subject enrolled late August, 2011
- Final follow-up call completed last month
- Patient Screening: 67 patients treated during enrollment period (37 did not enroll)
- No control group

Patient Screening Data

(Number of Patients)



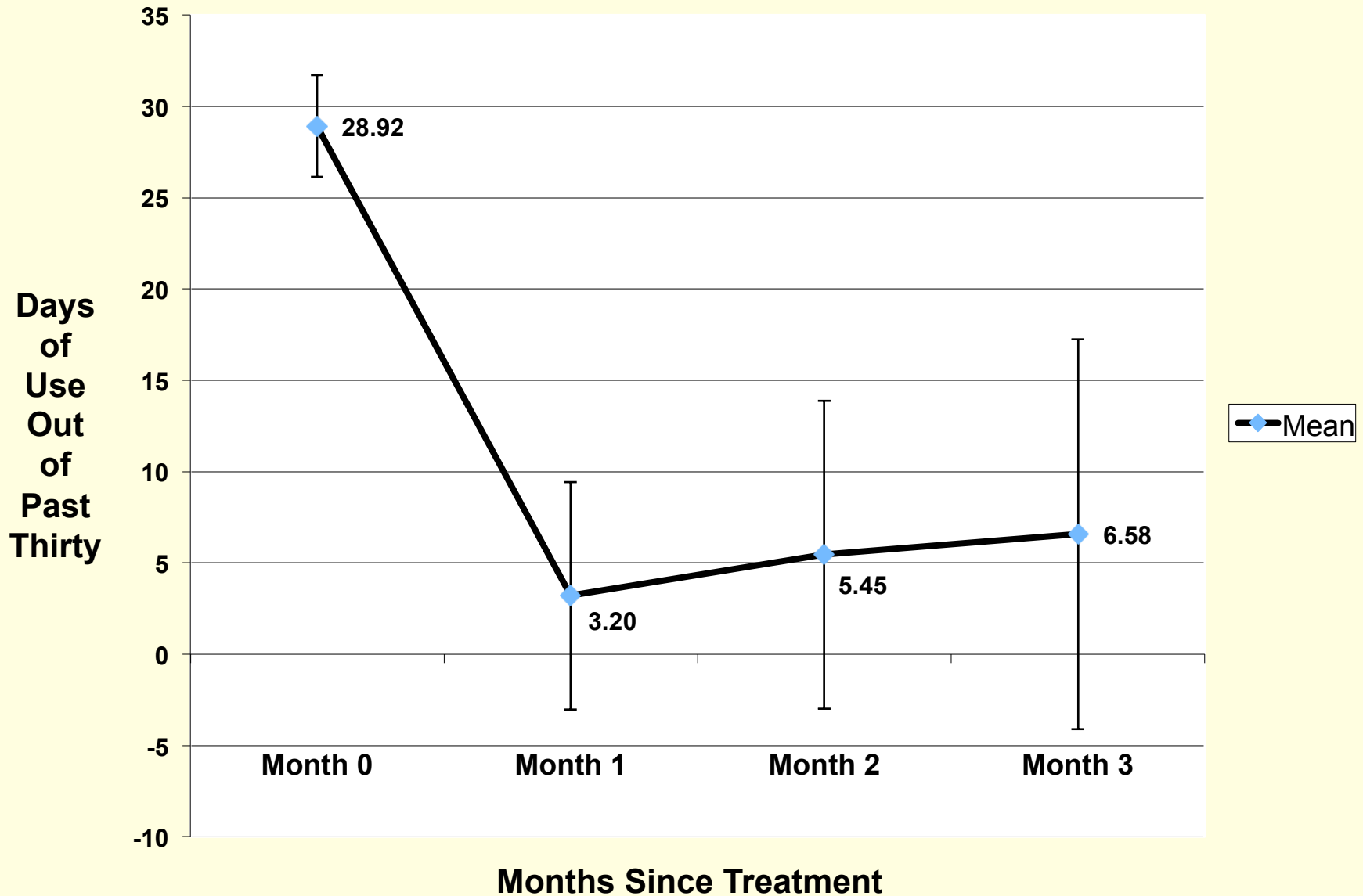
Preliminary Results

- Safety: no adverse events directly related to ibogaine treatment (n=67)
- Several patients (n = 7) treated multiply
- n = 12 subjects declared “Lost to Follow-up”
- Aftercare: N = 5 (3 residential rehab, 2 halfway house)

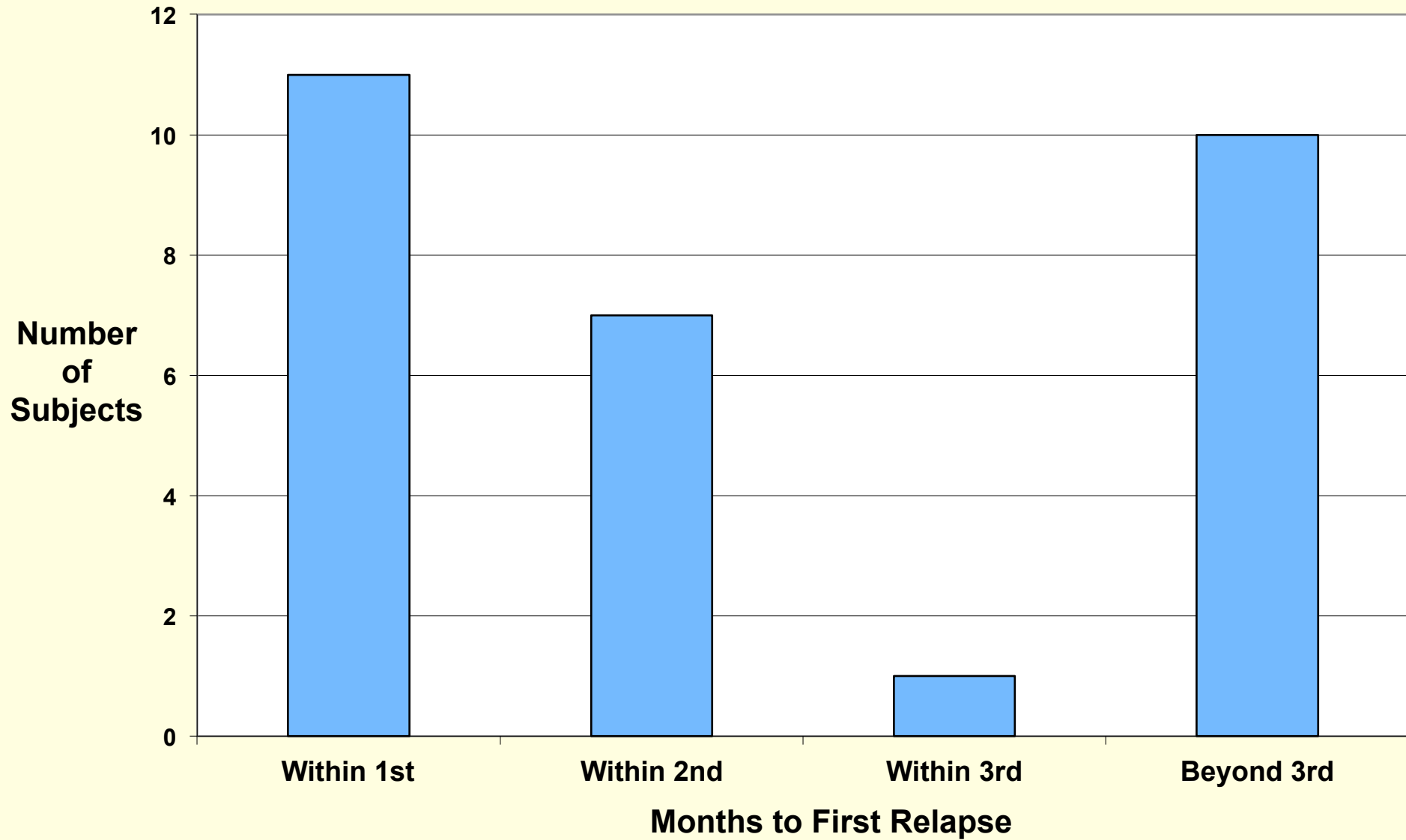
Preliminary Results

- ASI scores, secondary measure scores not yet analyzed
- Duration until first relapse (opiates) post-treatment
- Baseline opiate use (frequency) vs. opiate use at 1, 2, and 3 months post-treatment

Mean Opiate Usage Months 0-3



When First Relapse Occurred



> 1/3 relapse within first months

60% relapse within first 2 months

80% relapse within first 6 months

> 1/3 relapse within first months

60% relapse within first 2 months

80% relapse within first 6 months

20% make it more than 6 months (5 of 6 without any “aftercare” at all)

4 out of 30 (>1/8) “clean” for > 1 year following a single treatment

Reflections

- Confirmation that Ibogaine is an addiction interrupter -- not a cure, not a “magic bullet”
- What are the determinants of long-term outcomes?
- The importance of patient’s expectations

Strengths and Limitations of IOA-3

- Small “n”
- Many subjects unreachable month to month (→ LTFU)
- Some subjects reluctant to talk about relapses
- Strictly observational and so not affecting outcomes
- Standardly used measures (legitimacy, ease of comparison)
- Careful record-keeping
- 1st of its kind

New Zealand Ibogaine Study

Geoff Noller, PhD



- Ibogaine approved as prescription medicine in NZ (2010)
- Study began early 2012
- Aims to enroll 30 patients

A Call to Collective Research

- More data = better!
- Why collect data and make it public?
 - 1 Scientific studies can demonstrate efficacy beyond doubt
 - 2 Providers and patients can better assess efficacy and risks and determine best practices based on collective, shared data

What to Measure and Track?

Minimally

1. Substance use at baseline
2. Dosing schedule (iboga(ine) *and other*)
3. Previous treatments (iboga and other)

Recommended

1. EKG and other physical data related to safety, dosage
2. SOWS, QOL, any aftercare
3. Follow-up measures

What Instruments to Use?

- Severity of addiction: ASI-Lite or Severity of Dependence Scale (5 items)
- SOWS (available for free online)
- Beck Depression Inventory (or for free: Zung self-rating Depression Scale, also widely used)
- Ferrans and Powers QLI – generic – or WHO Quality of Life (“open-source”)
- Self-reported craving scale (PhenX Toolkit)

Who's going to do this?

- Who will collect the data? (Clinicians? Interns?)
 - Who will compile (and analyze) the data from various clinics?
 - How can it be made available publicly?
- Global (online) clearinghouse for shared data?

Continuing the Conversation

My email: kingsley@ucsd.edu

