Ayahuasca-assisted addiction treatment in Peru: qualitative results from a multi-year, mixed-methods study at Takiwasi Center

Olivia Marcus, Sara García, Ariane Spitalier, Anja Loizaga-Velder, Fernando Mendive, and Brian Rush

Olivia Marcus, MPH, PhD
Postdoctoral Fellow
Behavioral Sciences Training in Drug Use Research (T32 DA007233)
New York University, Rory Meyers College of Nursing
oliviamarcus@nyu.edu

Aims of this talk:

- Describe the Takiwasi Center and the ATOP Project
- Identify treatment motivation and expectations at baseline
- Describe most meaningful and most challenging experiences at Takiwasi
- Implications for emergent research in ayahuasca- and psychedelic-assisted therapies (P-AT)

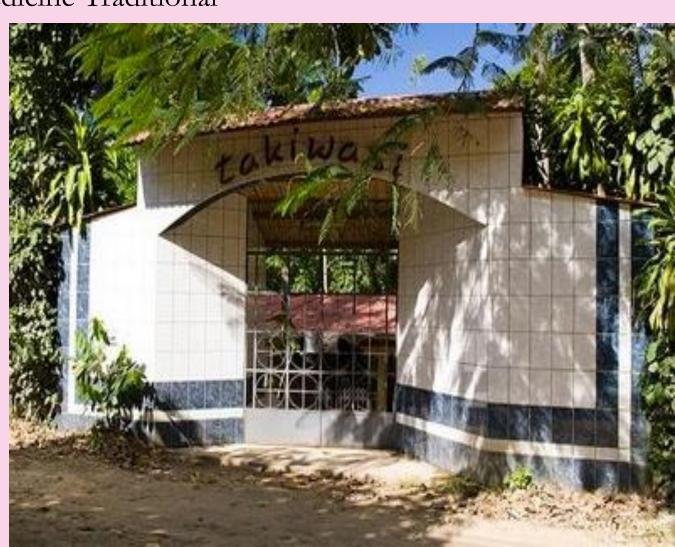
Takiwasi Center

Takiwasi Centro de Rehabilitación de Toxicómanos y de Investigación de Medicine Traditional

Founded 1992 in Tarapoto, San Martín, Perú

Hybridized Therapeutic Community Model

- 9-month all-male residential program (~15 patients)
- Convivencia 'milieu therapy', communal living
- Psychotherapy individual and group
- Christian elements iconography, optional misas,
 baptisms, rituals
- Ergoterapia occupational therapy, daily tasks
- Plant diet retreats (dietas)
- Ayahuasca ceremonies (approx. 2x/month)



Traditional Amazonian Medicine

<u>Ayahuasca</u>

- Psychoactive tea
- 'psychedelic' experiences
- post-ceremony group therapy
- Individual psychotherapeutic support before and after



Banisteriopsis caapi





Psychotria viridis



Traditional Amazonian Medicine

Ayahuasca

- Psychoactive tea
- 'psychedelic' experiences
- B. caapi + P. viridis
- post-ceremony group therapy
- Individual psychotherapeutic support before and after

<u>Dietas</u>

- 10-day isolation retreat with *plantas maestras*
- Teacher plants facilitate self-exploration and healing
- Psychotherapeutic support before, during, and after

<u>Purges</u>

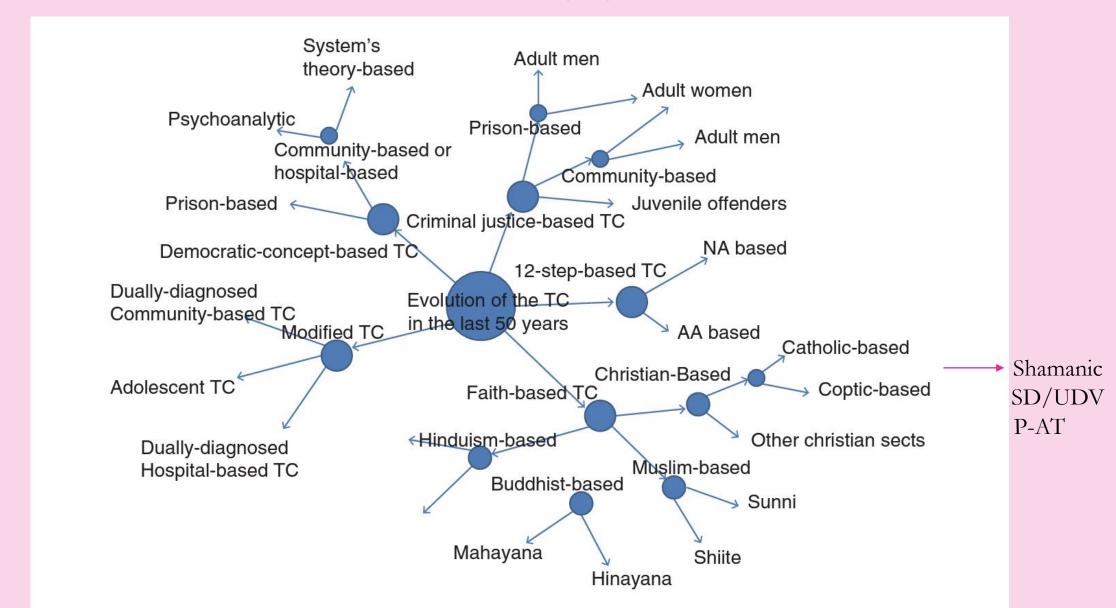
- Physical and energetic cleansings
- Aids process of detox
- Facilitates work with plantas maestras
- Psychotherapeutic properties

Takiwasi therapeutic model

- Hybridized ideologies drawing from
 - Local Mestizo and Indigenous knowledge and practices
 - Catholic-Christian beliefs and ritual
 - Psy-disciplines (psychology, psychiatry, psychotherapies, social work, psy-informed means of 'working on the self')
 - Strong emphasis on spirituality, including the etiology and meaning of addiction
- Treatment duration: 9 months, 3 'trimesters'
- Abstinence-oriented or reformulating relationship with substances?
 - Consuming after might be part of the process of recovery

Evolution and hybridization of the TC through cultural diffusion

Fernando B. Perfas (2019)



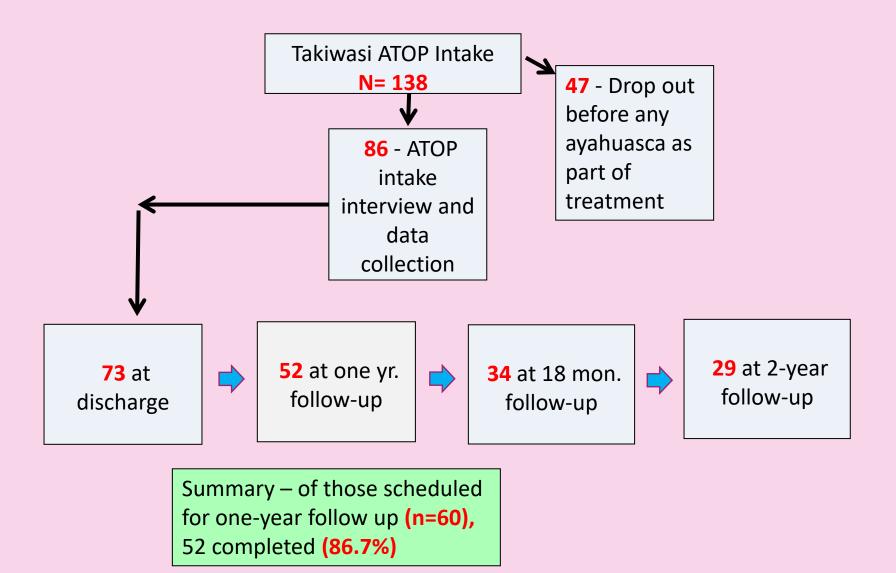
The Ayahuasca Treatment Outcome Project (ATOP)

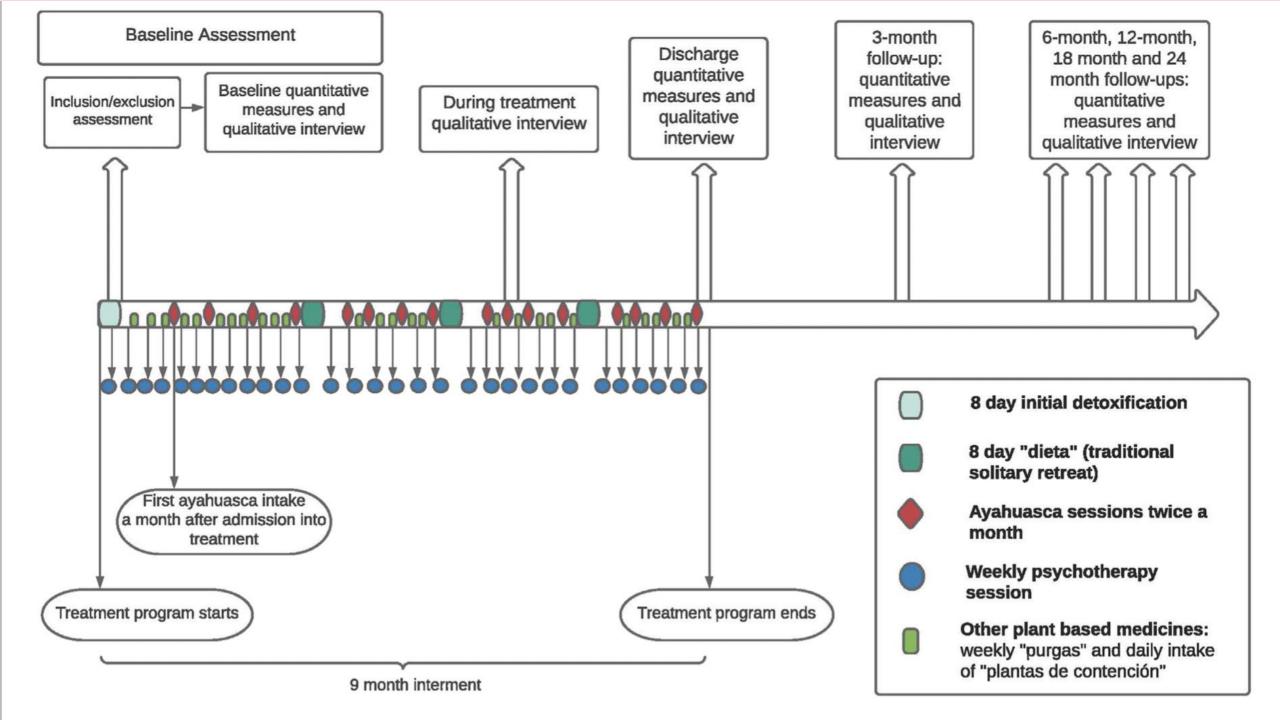
- Mixed-methods, longitudinal study of treatment outcomes for addictions and mental health at Takiwasi Centre, Perú
- Planning meeting 2013
- Data collection 2016-2020

Rush, B., Marcus, O., García, S., Loizaga-Velder, A., Loewinger, G., Spitalier, A., & Mendive, F. (2021). Protocol for outcome evaluation of ayahuasca-assisted addiction treatment: The case of Takiwasi Center. Frontiers in Pharmacology, 12, 1203.

Rush B, Marcus O, García S....Mendive F. (Forthcoming 2023). **Ayahuasca Treatment Outcome Project (ATOP): One Year Results from Takiwasi Center**. *Journal of Studies on Alcohol and Drugs*.

ATOP Recruitment Overview





ATOP measures: Quantitative

- Core **baseline** and **outcome** measures
 - Substance use severity (ASI-5)
 - Substance use quantity/frequency (GAIN-I)
 - Mental health (Beck Depression and Anxiety Inventories)
 - Multi-morbidity MINI mental
 - Quality of life (WHOQOL-BREF)
 - Spirituality (WHO-SRPB)
 - Satisfaction with services (CSQ-8)
 - Motivation/Readiness for change Treatment Entry Questionnaire (TEQ)

ATOP measures: Qualitative

- Context description through site visits and use of existing ethnographic published work
- Managers/staff/healers interviews
- Participant interviews
 - Pre-treatment
 - During treatment
 - Follow-up (3, 6, 9, 12, 24 months)

Meanings/personal significance
Program experience
Recovery process
Satisfaction with services

Who comes to Takiwasi?

Demographics (Baseline n=73)

Age (mean 33.5)	N (%)
18-29	29 (39.7)
30-39	27 (37.0)
40-59	17 (23.3)

Employment	N (%)
Yes	42 (57.5)
No	22 (30.1)
Student	9 (12.3)

Nationality	N (%)
Peru	30 (41.1)
Europe	18 (24.7)
Other S.A.	20 (28.4)
North America	5 (6.8)

Religion	N (%)
None	29 (39.7)
Christian	43 (58.9)
Other	1 (1.4)

Clinical Profile (Baseline n=73)

Treatment History	N (%)
0	8 (11.0)
1-2	30 (41.1)
3+	30 (41.1)
Unknown	5 (6.8)

Mental Health Diagnosis	N (%)
0	4 (5.5)
1-2	14 (19.2)
3-6	43 (58.9)
7+	2 (2.7)

Principal substance	N (%)
Alcohol	16 (21.9)
Opioids	10 (13.7)
Cocaine/Crack/CP	27 (37.0)
Cannabis	14 (19.2)
Other	6 (8.2)

Is our follow-up sample representative of Takiwasi clients?

- Our one year sample did NOT differ from other sub-groups at baseline (e.g., left early; not at one-year mark)
 - Mental health co-morbidity
 - Treatment motivation
 - Region of birth
 - Religious affiliation
 - All baseline outcome measures
- The group reaching the one-year follow up tended to be somewhat younger.

Program Participation

Length of stay (weeks) (Mean/SD) 27.9 (12.9)	N (%)
< 10	7 (13.5)
10-19	9 (17.3)
20-29	8 (15.4)
30-39	21 (40.4)
+40	7 (13.5)

Qualitative sample

- 26 baseline interviews analyzed to create baseline code book (50% of ATOP participants)
- 19 chosen for further analysis based on completion of 2-year FU

Age	24-59 (mean 39.5)
Nationality	6 Peru, 2 Ecuador, 2 Colombia, 1 Chilé, 1 Belgium, 2 France, 1 Spain, 2 Canada, 2 USA
Occupation	unemployed, mechanic, clinical psychology, anthropologist, business administration, accounting, construction, artist, agriculture
Tx exposure	5-50 weeks
Primary substances	alcohol, cocaine/cocaine paste, cannabis, prescription drugs (benzos, opioids)

Qualitative Sample (n=19)

Previous treatment experience	Previous experience with psychedelics	Previous experience with ayahuasca
18 (94.7%)	15 (78.9%)	11 (57.9%)

Baseline themes: Motivation & Expectations

- Express being highly motivated for treatment and change
 - Need for dramatic life change / last hope
 - Seeking physical, spiritual, and behavioral changes
 - Appreciation for the 'professional' and medicalized model
 - Belief in efficacy of the combination of psychology and work with the plants
 - Emphasis on spiritual connection, finding oneself, the root of addiction

Motivations/Expectations: Professionalism, medical expertise, 'hybrid' model

"A mix of mental health professionals and curanderos. Other places don't have this. Its very stable, there is a relationship with the government." (p75, 31, USA)

"I read that Takiwasi has government certification, from the state... Takiwasi has medical certification and very good professionals, also ayahuasca, right? ... And I wanted to return to another ayahuasca center but my mom told me 'I think you have to go to Takiwasi because it has medical certification and it's more professional' and well I said that's fine and I came here for Takiwasi, that is, I decided." (p76, 33, Perú)

"In fact at Takiwasi, I feel that they use scientifically validated techniques and at the same time they dared to unite Amazonian shamanism with psychology and it is working incredibly well. Something I don't see anywhere else..." (p1, 26, Ecuador)

Find oneself, get to the root of addiction

"...I know that all of these problems, they come from somewhere, roots from perhaps when I was a child... because of the abuse that I suffered, it all comes from somewhere, and that's why I came to Takiwasi, because I want to know the roots of this problem, but I want to get rid of those things...I have faith that ayahuasca will help me, I have a lot of faith." (P18, 41, Canada/Chilé)

"Well my main expectation is...is to know what the ancestral processes are and of my experience, my social experiences that led me to excessive consumption." (P40, 33, Chilé).

Find oneself, get to the root of addiction

"Perhaps what I am looking for is not to change, but actually to find myself. I have not yet gone through the ingestion of ayahuasca and I don't know if that is going to change ...what I want to do is find myself, really how I am and my nature...I don't want to change my structure because I don't feel bad. I feel how I am. Complex, contradictory, strange..." (P10, 49, Ecuador)

"...I hate that they, let's say, give me more drugs, because the medications are other drugs, in order to stop, to cover all the roots of the problem, I don't like this. That's why I have come here [to Takiwasi]." (P24, 27, Spain)

Baseline Expecations: Integrative (psy + sacred plants)

I think that all aspects [of the program] are important. I don't think I can heal myself with only one type of magical treatment and so I think [Takiwasi] is very good and a bit difficult as well...a good mix of plants, of compassion therapy, and of *convivencia* y of normal, healthy things from daily life. (p8, 32, USA/DR)

Discharge: Integrative (psy + sacred plants)

I had done a lot of psychological work from the rational, cognitive perspective, but they didn't touch the subject of feeling before a profound reality of being, of existence. So let's say I had some ability to work on my issues [in previous tx experience], but it was not efficient. In the end, my issues persisted and there was no complete healing. This is what has changed a lot when I came here. (p4)

In all aspects, I believe that a psychological treatment would not have had an effect if there had not been the accompaniment of the plants, of the isolation, and also finally the spiritual aspect. (P10, 49, Ecuador)

Discharge: Integrative (psy + sacred plants)

Even to explain the treatment components is very difficult because the plant without the *convivencia* would give different results. The convivencia without the psychotherapy would be a massacre. The psychotherapy without the convivencia, without plants would be a process of 15 years. So you have to understand them as speaking to and working through the themes of that each evokes. (P1, 26, Perú)

Discharge: Ayahuasca + Dietas

- "Dejarse llevar por la planta" letting oneself be guided by the plants
- Confidence / faith in the wisdom of the plants
- Highly significant spiritual experiences
- Connection with one's emotions
- Ineffable experiences
- Challenging
- "For me its been the experience of my life, there are no words, the experience of my life." (P24, 27, Spain)

Ayahuasca

The aspect that stands out the most to me about ayahuasca is that it made me feel. That I began to feel and perceive the world, my inner world in a different way... ayahuasca taught me to feel, it showed me my emotions, my feelings (P4, 28, Colombia)

It has helped me a lot – to go ashore, to feel, to be able to balance my emotions, which before were very uncontrolled, very exaggerated, and sometimes very repressed...(P7, 24, Perú)

Dietas

At the beginning, the first dieta, I didn't find it contributed much...I expected something like the ayahuasca experience, like everything condensed. But with the next diet I realized that the way the plant works is very profound, that it is very long-term, and that it gives you a structure...it makes a transcendental change in you... I feel that without the dieta it would have been much more difficult to progress in the work with ayahuasca because fundamental aspects of the dieta heal you so that you can connect with the plant, connect with spirituality, with life... (P4, 28, Colombia)

Ayahuasca no 'magic pill'

I found out that there isn't, that there isn't magical lighting that falls from the sky overnight and that cures you, that this has been a process that has taken me 8 months, that I'm starting to get out from here and I feel that I am beginning a process, that this process has cost me a lot of work, a lot of work, many hours of therapy, many hours of purges, ayahuasca sessions, diets, workshops, and that like everything in life, this will require daily maintenance.

(P10, 49, Ecuador)

It is not a vaccine, ayahuasca does not vaccinate you [against addiction], that is, it teaches you. Its not like taking a pill that cures you; it teaches you, and it depends on you if you want to face life without drugs, ayahuasca will not do it for you. (P24)

Discharge: Most & Least Helpful Tx Components

- Relationships between experiences in the program and the outcomes
 - Rating distributions show very little variance in perceptions of the most important part of the process, i.e., everyone likes everything or at least have an appreciation for their efficacy

Most/Least helpful treatment components?

The truth is that I don't know, that is, the ones that helped me the least are the ones I liked the least, but the ones that I liked the least may have helped me a lot, so it's a question [that is difficult to answer] (p4, 28, Colombia)

...separating [the treatment components] I think is absurd. In Takiwasi no. I think it cannot analyzed scientifically, but to see what works, practically, at a practical level it doesn't make sense to separate them. To try to analyze what is not... the most it will do is just break your head. (p1, 26, Perú)

Challenging aspects of Takiwasi

- Most difficult was the emotional exhaustion...It is a very demanding treatment, with a very strong rhythm, there is a point at which one can no longer take it, you arrive here exhausted emotionally, physically, mentally (P1)
- Issues with the therapists
 - Haven't 'done their own work' and don't know how to manage authority
 - Younger, no children
- Frustration with the ayahuasca ceremonies
- Language barriers

Summary

- Outcomes: high motivation for treatment at baseline and high self-efficacy for change at discharge
- Who are these interventions for? How sustainable are the outcomes?
- Methodological challenges in doing psychedelic science for health outcomes
- Can't distill an 'active ingredient' with a complex intervention (changes over time, upon reflection)
- Given complexity around set, setting, substance, what are the alternatives to the RCT model that wants to identify the 'active component' or 'essential elements'?

Implications for TCs and P-AT programs

- Highlights the role of naturalistic study design in an emergent field of both clinical and non-clinical care delivery
- Role of long-term residential treatment that incorporates P-AT models
- Hybridized psychedelic-assisted TC in 'othered' cultures
- Ayahuasca-assisted therapy is a complex intervention

Limitations

- Observational no controls or comparisons
- Retention rates who are the dropouts, loss to follow-up
- Variation in depth of interviews
- Limitations inherent in the study questions

Thank You

Qualitative team: Sara García Arce, Ariane Spitalier, and Anja Loizaga-Velder

PIs: Brian Rush and Fernando Mendive

Special thank you to Jonathan Ramirez (UoT), Chris Richardson (UBC), and Cecile Giovanetti

NYU Behavioral Sciences in Drug Use Research, supported by NIDA grant (T32 DA007233). Points of view are mine alone.

Conflict of Interest Statement

- Financial support was provided by Vivadis for the initial ATOP planning meeting in 2013. Vivadis has no financial interest in psychedelic medicine.
- DEVIDA the Peruvian government agency for drug addiction prevention and treatment, also provided support for the planning meeting.
- Fernando Mendive and Sara Garcia were previously employed at Takiwasi Centre.
- All members of the team are volunteers and receive no compensation and have no conflicts of interest. This now includes Fernando and Sara.