

“THIS IS SOMETHING THAT
CHANGED MY LIFE”: A
QUALITATIVE STUDY OF
PATIENTS’ EXPERIENCES IN A
CLINICAL TRIAL OF KETAMINE
TREATMENT FOR ALCOHOL
USE DISORDERS

Lisbon Addictions 2022
23rd of November

O. Merve Mollaahmetoglu,
Johanna Keeler, Katherine J
Ashbullby, Eirini Ketzitidou-
Argyri, Meryem Grabski, & Celia
Morgan

CONFLICTS OF INTEREST

Celia Morgan and Meryem Grabski have received royalties for KARE therapy license distribution; KARE therapy is licensed from University of Exeter to Awakn Life Sciences.

I have conducted literature reviews for Awakn Life Sciences.

All other authors declare no conflict of interest.

BACKGROUND:

USES OF KETAMINE



Anaesthetic and analgesic

Developed as an anaesthetic in 1962. Termed "dissociative anaesthetic" (1)



Recreational use due to subjective effects

At lower doses, produces hallucinations, out of body experiences and time and space distortions (2)



Treatment of psychiatric disorders

Research into treatment of depression and anxiety, in the context of psychedelic psychotherapy (3)



Treatment of alcohol /substance use disorders

Short term increases in abstinence, reductions in craving and drug use reported in systematic reviews (4,5)

BACKGROUND:

SUBJECTIVE EFFECTS OF KETAMINE



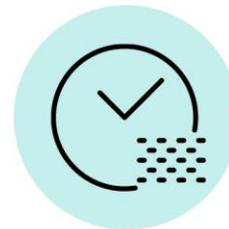
Dissociation from body, sense of self, the environment

Dissociation



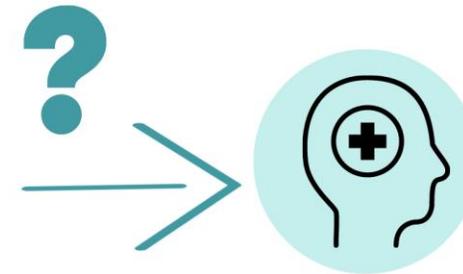
Visual or auditory distortions, hallucinations, visions.

Sensory distortions



Transcendence of time and space, time and space losing everyday meaning

Time and space distortions



Therapeutic outcomes

Ketamine's subjective effects have been viewed as adverse effects- though they may predict treatment effects (6,7)

METHODS:

Design: Semi-structured interviews on acute ketamine experiences, long term effects of the trial and current drinking levels.

Participants: 12 participants (9 males, 3 females) who had received ketamine in a clinical trial of ketamine treatment for alcohol use disorders

-Diagnosis of alcohol use disorders (DSM-V) or alcohol dependence (DSM-IV)

-Exclusion criteria: Relapse prevention or antidepressants uncontrolled hypertension, a history of psychosis ^(8, 9)

Setting: Ketamine for the reduction of alcoholic relapse trial.

Three ketamine infusions (or placebo) over three weeks + 7 sessions of therapy or education ^(9, 10)

Data analysis: Reflexive Thematic Analysis with an essential/realist approach & theoretically informed ^(10, 11)

QUALITATIVE RESULTS:

1. Multifaceted motivations for seeking ketamine in a clinical trial

2. Set and setting as influential in determining acute ketamine experiences

→ 3. The inherent contradictions of the acute ketamine experience: ketamine as a rollercoaster of experiences

4. Rapidly fluctuating and changing ketamine experiences

5. Meaningful, spiritual and mystical experiences

→ 6. The ketamine infusions and the trial as potentially transformative

THE INHERENT CONTRADICTIONS OF THE ACUTE KETAMINE EXPERIENCE

Dissociation:

“... My whole feeling of my body disappeared....It was like being an amoeba and just floating in space. I had nobody, I had no- I was a soul” (P03).

Ego dissolution:

“...what was important was my relationship with the universe and the universe as a whole, and therefore those relationships with people and other entities, nature, wildlife and things of that scale were still important. And I was a part of that, a tiny part of that....I was part of this greater whole.” (P07)

TRANSFORMATIVE EFFECTS OF THE TRIAL AND THE INFUSIONS

Change in the relationship with alcohol:

"I still drink, but I'm quite capable of having 2,3,4,5,6,7 days where I'm just not bothered about it, which is not something that happened in the past" (P04).

"It's more just sociable drinking now, not: 'Oh I've got nothing to do after I finish work, I might as well just go get a bottle of rum and drink that'" (P12).

"I feel I have much less desire to drink now than I used to. And I think what it is, I actually, I think, enjoy it less now" (P11).

TRANSFORMATIVE EFFECTS OF THE TRIAL AND THE INFUSIONS

Dissociation and transformative effects:

“So moving onwards in life, every time I get something that’s quite testing or you know a problem, I just say, ‘well, a couple of months ago, I was just white.... So how bad can this be?’” ... At least I’m not white, you know, at least I’ve got a body, at least I’m alive kind of thing (P05).

*“...After the first one, I knew I wasn’t going to drink again.” ...
“I don’t recall what pint tastes like, now a pint was my drink. And I couldn’t imagine the taste, so instantly I was not wanting to drink” (P03).*

TRANSFORMATIVE EFFECTS OF THE TRIAL AND THE INFUSIONS

Ego dissolution and transformative effects:

“...The sense of oneness that I felt and the sense of moving away from focusing on the worries and the small stuff is helpful in terms of improving my relationship with alcohol. Because I think I used alcohol as a self-medication and as a blocking and avoiding mechanism. And I think feeling that those issues are less prevalent or at least less important means I feel less motivated to drink.”
(P07).

DISCUSSION:

Ego dissolution vs dissociation: the term “dissociative anaesthetic” (12) may not be sufficient to characterise acute ketamine experiences

Mechanisms of therapeutic effects: Feelings of dissociation and ego dissolution reported to be linked to therapeutic effects.

Lasting change on relationship with alcohol: trials of ketamine treatment can consider outcomes beyond abstinence and relapse rates

Limitations:

- potential of self-selection into the trial and the interviews
- Non specific factors may explain therapeutic benefits

THANKS FOR
LISTENING.

QUESTIONS?

Contact details:

Merve Mollaahmetoglu

m.mollaahmetoglu@sheffield.ac.uk

TO ACCESS THE PAPER:



Credits: Infographics were made on Piktochart.com. Infographic on slide 4 has been designed using images from Flaticon.com

REFERENCES 1:

1. Denomme, N. (2018). The Domino effect: Ed Domino's early studies of psychoactive drugs. *Journal of Psychoactive Drugs*, 50(4), 298-305.
2. Stewart, C. E. (2001). Ketamine as a street drug. *Emergency medical services*, 30(11), 30-34.
3. Aan Het Rot M, Zarate CAJ, Charney DS, Mathew SJ. (2012). Ketamine for depression: where do we go from here? *Biol Psychiatry*.72:537–47. doi: 10.1016/j.biopsych.2012.05.003
4. Jones JL, Mateus CF, Malcolm RJ, Brady KT, Back SE. (2018). Efficacy of ketamine in the treatment of substance use disorders: a systematic review. *Front Psychiatry*. 9:277. doi: 10.3389/fpsy.2018.00277
5. Walsh, Z., Mollaahmetoglu, O. M., Rootman, J., Golsof, S., Keeler, J., Marsh, B., Nutt, D. J., & Morgan, C. (2021). Ketamine for the treatment of mental health and substance use disorders: comprehensive systematic review. *BJPsych open*, 8(1), e19. <https://doi.org/10.1192/bjo.2021.1061>
6. Dakwar E, Anerella C, Hart CL, Levin FR, Mathew SJ, Nunes EV. Therapeutic infusions of ketamine: do the psychoactive effects matter? *Drug Alcohol Depend*. (2014) 136:153–7. doi: 10.1016/j.drugalcdep.2013.12.019
7. Dakwar E, Nunes EV, Hart CL, Hu MC, Foltin RW, Levin FR. (2018). A sub-set of psychoactive effects may be critical to the behavioral impact of ketamine on cocaine use disorder: Results from a randomized, controlled laboratory study. *Neuropharmacology*. 142, 270–6. doi: 10.1016/j.neuropharm.2018.01.005

REFERENCES 2:

8. McAndrew, A., Lawn, W., Stevens, T., Porffy, L., Brandner, B., and Morgan, C.J. (2017). A proof-of-concept investigation into ketamine as a pharmacological treatment for alcohol dependence: study protocol for a randomised controlled trial. *Trials* 18(1), 159. doi: 10.1186/s13063-017-1895-6.
9. Grabski, M., McAndrew, A., ... Morgan, C. (2022). Adjunctive Ketamine With Relapse Prevention-Based Psychological Therapy in the Treatment of Alcohol Use Disorder. *The American journal of psychiatry*, 179(2), 152–162.
<https://doi.org/10.1176/appi.ajp.2021.21030277>
10. Braun, V., and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2), 77-101. doi: 10.1191/1478088706qp063oa.
11. Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. *Qualitative Psychology*, 9(1), 3–26. <https://doi.org/10.1037/qup0000196>
- 12 Domino, E., Chodoff, P., and Corssen, G. (1965). Pharmacologic effects of ci-581, a new dissociative anesthetic, in man. *Clin Pharmacol Ther.* 6, 279-291. doi: doi: 10.1002/cpt196563279.

PARTICIPANT CHARACTERISTICS

TABLE 1 | Demographic and clinical characteristics of participants.

ID	Age	Gender	Ethnicity	Site	DSM-V criteria at baseline	Total number of infusions	Total number of psychotherapy/ education sessions	Psychotherapy or alcohol education allocation	Current drinking days per month	Current craving levels (ACQ-SF-R)	Abstinence following the trial	Reasons for breaking abstinence	History of anxiety	History of depression	Time from last infusion to interview
P02	59	Male	White	Exeter	4	3	7	Psychotherapy	20-25	2.74	39 days	Social event	No	No	2 years and 8 months
P03	47	Female	White	Exeter	9	3	7	Psychotherapy	0 (Abstaining)	3.45	Fully abstinent	N/A	Yes	Yes	1 year and 8 months
P04	53	Male	White	Exeter	7	3	7	Alcohol education	8-10	2.58	40 days	Desire to drink	No	Yes	1 year and 1 month
P05	53	Male	White	Exeter	10	3	7	Psychotherapy	0 (Abstaining)	2.08	Fully abstinent	N/A	No	No	11 months
P06	56	Female	White	London	5	3	7	Alcohol education	20	2.45	2 months	Celebration	Yes	Yes	1 year and 8 months
P07		Male	White	London	7	3	7	Alcohol education	0 (Abstaining)	3.55	6 months	Stress and low mood	Yes	Yes	1 year and 1 month
P08	42	Male	Scottish Iranian	London	9	3	7	Alcohol education	8	4.57	1-2 months	Social event	No	Yes	2 years and 3 months
P09	35	Male	White	London	9	3	7	Psychotherapy	2	3.11	1 month	Social event	Yes	Yes	1 year and 2 months
P10		Male	White	Exeter	9	3	7	Alcohol education	3-4 days (Abstinent except for a recent binge)	2.97	14 months	Stress and low mood	Yes	Yes	1 year and 1 month
P11	50	Male	White	Exeter	10	3	7	Alcohol education	14	2.58	12 days	Social event	No	No	2 years and 6 months
P12	22	Male	White	Exeter	7	3	7	Alcohol education	15-20	3.5	2 months	Social event	No	No	2 years and 4 months
P13	48	Female	White	Exeter	7	1	2	Psychotherapy	28	1.34	Not known	N/A	Missing	Missing	3 years and 4 months

DSM-V, Diagnostic and Statistical Manual of Mental Disorders 5th version; ACQ-SF-R, Alcohol Craving Questionnaire Short Form Revised. The participant allocated ID number 01 was subsequently not available for interview.