Statement of Torsten Passie M.D., Ph.D

I have not received any monetary compensation from any parties involved in this court case.

I am a state-financed psychiatric expert and researcher employed at Hannover Medical School (Europe, Germany). I have worked for more than 20 years in the field of psychiatric addiction research. My Curriculum vitae is attached.

I have led and completed clinical (human subject) studies of the drugs cannabis, ketamine, nitrous oxide, and psilocybin.

A dissertation under my guidance was recently completed, reviewing all the psychopharmacological data about the major hallucinogenic tryptamines (including DMT, 5-MeO-DMT, DET, DPT, and others).

Our research group has published comprehensive pharmacological reviews of psilocybin[1] and LSD[2].

Here are some of my points regarding the use of Ayahuasca in an established setting of a specific religious group, which includes the plaintiff in this case.

Pharmacological considerations

1.1 DMT has a well-documented pharmacology based on many experimental human and animal studies (in contrast to other hallucinogenic tryptamines)[3].

1.2 DMT is part of the human physiology[4]. Its functions are still unknown[5].

1.3 DMT is physiologically well tolerable in healthy humans[6]. There are no deaths documented from DMT use[7].

1.4 DMT causes no long-lasting alterations of the brain or organism[8].

1.5 It was repeatedly demonstrated that DMT (and its metabolites) is not involved in the pathophysiology of psychoses[9].

1.6 Physiological DMT may play a role in the physiology of dreaming[10].

1.5 DMTs receptor pharmacology is different from LSD[11].

1.6 There is only partial cross-tolerance between DMT and LSD[12].

1.7 DMT has almost no effects on the brain's dopamine mediated reward system, which would predict that DMT's capacity for addiction is extremely limited[13].

1.8 DMT does not induce addictive behavior in monkeys and other mammals (in contrast to for example the dependence-producing opiates or stimulants, animals do not inject themselves with DMT when available)[14].

Pharmacokinetics and harm reduction

2.1 Ayahuasca preparations may be referred to as a harm-reduced hallucinogen for the following reasons:

a) DMT is very short-acting (smoked 5-15 min.; intramuscular 30-50 min., as Ayahuasca-oral preparation 30-80 Min.) compared to LSD (6-10 hrs.)[15].

b) When DMT is given as an orally active drink, the experience is much more compatible to human subjects. The applied dose and its pharmacokinetics are much more controllable, in contrast to all other routes (except for intramuscular)[16].

c) The curve of DMT's subjective effects after oral dose administration is much less like a peak and is a 45 min. plateau instead[17].

d) Because of the slow onset by the oral route, humans can adjust much better to the physiological and psychological changes induced[18].

e) Controlled oral ingestion reduces DMTs potential for psychological harm (no overwhelming effects as known from smoking or injecting DMT)[19].

f) Controlled oral ingestion reduces DMTs potential for physiological changes (no steep blood pressure rise as known from smoking or injecting DMT)[20].

g) The harmala alkaloids in the Ayahuasca preparation add a sedating component and for this reason attenuates the arousal effects induced by DMT[21].

2.2 There may be drug or dietary interferences with the Harmala-alkaloids used in the Ayahuasca potion. These have to be evaluated separately from DMTs effects.

Potential health hazards resulting from DMT/Ayahuasca use

3.1 There are no emergency room visits documented in regard to DMT or Ayahuasca.

3.2 There are no prolonged psychotic reactions, drug-induced psychosis, suicides or criminal acts resulting from DMT use documented in the scientific literature.

3.3. There are no flashbacks or HPPD resulting from DMT documented in the scientific literature.

3.4 Health hazards from DMT/Ayahuasca may result from weakening of ego structures in predisposed psychologically labile (or prepsychotic) subjects, which have to be screened out[22].

3.5 There is no evidence that these religious groups attract specifically mentally ill people[23].

Social considerations

4.1 The drug DMT is known to researchers since ca. 1955 and to the drug scene since ca. 1965[24], but DMT was never widely distributed in human research or the drug scene [25] (approx. < 0,001% of drug taking and criminality).

4.2 The three major Brazilian ayahuasca religions do not appear to have significantly expanded their membership since the mid-90s[26].

4.3 No critical expansion or dangers have resulted since the Netherlands' Santo Daime groups were given official recognition and exemption from criminal penalty for their sacramental ingestion of ayahuasca/Daime[27].

Critical points

5.1 Critical is the initial screening of participants before they begin to participate. Ideally, a screening instrument would capture detailed mental health history and be administered or reviewed with a professional psychiatrist.

5.2 Participating subjects have to be screened for other medical conditions and for other (potentially interacting) medications[28].

5.2 A system of quality control for sacramental ayahuasca should be established.

5.3 As far as known from European countries (Spain and the Netherlands) there seems to be no public health risks resulting from UDV/Santo Daime religious rituals. Nor have specific health problems been documented to arise from the religious use of ayahuasca, but such risks have not been ruled out completely.

FOOTNOTES

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Diagram of the typical clinical course of DMT-effects (equivalent to plasma levels) during different modes of application (nach Angaben von Strassman et al. 1994a, Callway et al. 1999, Riba 2003, Gouzoulis-Mayfrank et al. 2005).
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