## Psychedelics and the Military: What a Long, Strange Trip It's Been

Sometimes the light's all shinin' on me, Other times, I can barely see, Lately, it occurs to me, What a long, strange trip it's been. The Grateful Dead, "Truckin"



Cynthia Geppert is Editor-in-Chief; Professor and Director of Ethics Education at the University of New Mexico School of Medicine in Albuquerque. Correspondence: Cynthia Geppert (fedprac@mdedge.com)

*Fed Pract.* 2022;39(10). Published online October 9. doi:10.12788/fp.0332 n 2019 the Defense Advanced Research Projects Agency invested \$27 million in the Focused Pharma program to develop new, more efficacious, rapid-acting drugs, including hallucinogens.<sup>1</sup> While Focused Pharma does not include human studies, the Veterans Health Administration's (VHA) newly launched psychedelics program research does include clinical trials.<sup>2</sup> When I read of these ambitious projects, I recalled 2 prescient memories from my youth.

The first memory was of a dinner table conversation between my father, then chief of pediatrics at a military hospital, and one of my older brothers, a burgeoning hippie. My father mentioned that the military was doing research on lysergic acid diethylamide (LSD), and my brother asked whether he could bring some home for my brother to try. My father looked up from the dinner table with incredulity and in an ironic monotone replied, "No you would not qualify for the research, you are not in the Army."

The second was about 10 years later, when I visited the state psychiatric hospital where my father directed the adolescent ward. I saw a group of young adults watching test patterns on an old-fashioned television set. When I asked my father what was wrong with them, he shook his head and said, "Too much LSD."

Albert Hoffman was a Sandoz chemist when in 1938 he serendipitously developed LSD while working on a fungus that grew on grain. LSD's psychoactive properties were not discovered until 1943. About a decade later, as the Cold War chilled international relations, the Central Intelligence Agency (CIA) began conducting experiments on military personnel in the MKUltra program using LSD, electroshock, hypnosis, and other techniques to develop a mind control program before its rivals did.<sup>3</sup>

Beginning in the 1950s, the US government collaborated with pharmaceutical companies and research universities to develop LSD as part of a campaign of psychological warfare. Though planned to be used against enemies, the program instead exploited US service members to develop hallucinogens as a form of chemical warfare that could render enemy troops mentally incapacitated. That psychiatrists, who then (as now) led much of this research, raised a host of ethical concerns about dual roles, disclosure, and duty.<sup>4</sup>

Government investigations and academic studies have shown that even soldiers who volunteered for the research were not given adequate information about the nature of the experiments and the potential adverse effects, such as persisting flashbacks. The military's research on LSD ended in 1963, not because of the unethical aspects of the research, but because the effects of LSD were so unpredictable that the drug could not be effectively weaponized. Like Tuskegee and other research abuses of the time, when the MKUltra program was exposed, there were congressional investigations.<sup>5</sup> Later studies found that many of the active-duty research subjects experienced a plethora of lasting and serious psychiatric symptoms. VHA practitioners had to put back together many of these broken service members. This program was rife with violations of research ethics and human rights, and those abuses tainted the field of hallucinogenic research in US Department of Defense (DoD) and VHA circles for decades.<sup>5</sup> These research abuses, in part, have led to hallucinogens being categorized as Schedule I controlled substances, effectively blocking federal funding for research until recently.

LSD, Psilocybin (4-phosphoryloxy-N,Ndimethyltryptamine), and 3,4-methylenedioxymethamphetamine (MDMA), popularly known as psychedelics, are again receiving attention. However, the current investigations into psychedelics are vastly different—scientifically and ethically. The most important difference is that the context and leadership of these studies is not national security—it is health care.

The goal of this new wave of psychedelic research is not mind control or brain alteration, but liberation of the mind from cycles of rumination and trauma and empowerment to change patterns of self-destruction to affirmation of life. The impetus for this research is not international espionage but to find better treatments for chronic posttraumatic stress disorder, severe substance use disorders, and treatment-resistant depression that contribute to unquantifiable mental pain, psychosocial dysfunction, and an epidemic of suicide among military service members and veterans.<sup>6</sup> Though we have some effective treatments for these often combat-inflicted maladies-primarily evidence-based psychotherapies-yet these treatments are not tolerable or safe, fast-acting, or long-lasting enough to succor each and every troubled soul. The success of ketamine, a dissociative drug, in relieving the most distressing service-connected psychiatric diagnoses has provided a proof of concept to reinvigorate the moribund hallucinogenic research idea.7

This dark chapter in US military research is a cautionary tale. The often quoted and more often ignored advice of the Spanish American philosopher George Santayana, "Those who cannot remember the past are condemned to repeat it," should serve as the guiding principle of the new hallucinogenic research.8 Human subjects' protections have exponentially improved since the days of the secret LSD project even for active-duty personnel. The Common Rule governs that all research participants are given adequate information that includes whatever is known about the risks and benefits of the research.<sup>10</sup> Participants must provide full and free informed consent to enroll in these clinical trials, a consent that encompasses the right to withdraw from the research at any time without jeopardizing their careers, benefits, or ongoing health care.<sup>10</sup>

These rules, though, can be bent, broken, avoided, or worked around. Only the moral integrity of study personnel, administrators, oversight agencies, research compliance officers, and most important, principal investigators can assure that the rules are upheld and the rights they guarantee are respected.<sup>9</sup> It would be a tragic shame if the promised hope for the relief of psychic pain went unrealized due to media hype, shared desperation of clinicians and patients, and conflicts of interests that today are more likely to come from profit-driven pharmaceutical companies than national security agencies. And for all of us in federal practice, remembering the sordid past forays with LSD can redeem the present research so future service members and veterans and the clinicians who care for them have better balms to heal the wounds of war.

## Author disclosures

The author reports no actual or potential conflicts of interest to report in regard to this article.

## Disclaimer

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