

## Psychedelics in Psychiatry, the Nursing Influence, and the Future of Psychedelic Therapies

Journal of the American Psychiatric Nurses Association I–8 © The Author(s) 2024 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/10783903231222930 journals.sagepub.com/home/jap



Carlton J. Spotswood 100

#### **Abstract**

**OBJECTIVE:** Psychedelics and psychedelic-assisted therapies (PATs) are on the cusp of becoming medicalized treatment modalities within the United States, both as potential U.S. Food and Drug Administration (FDA)-approved treatment and therapeutic options outside the medical model, through decriminalization efforts within individual states. Bringing with it a paradigm shift in the delivery of health care for both physical and mental health treatment. A workforce of highly trained facilitators will be needed to meet the anticipated demand for this type of treatment and nurses can play a key role in meeting this demand. This article serves to introduce psychedelic-assisted therapies to psychiatric-mental health nurses as we start to see this new field emerge. **METHOD:** Review of published literature and other media. **RESULTS:** Results based on historical data, modern applications, and future considerations. **CONCLUSIONS:** Nurses have been involved with psychedelic-assisted therapies in the past and are fully capable of providing a wide range of roles upon the anticipated approval as a treatment modality.

### **Keywords**

professional issues, psychotherapy—general, complementary and alternative therapies, nursing education, stigma

### Introduction

Approximately one-in-five adults in the United States live with mental illness (Mental Health America, 2022) and depression affects over 280 million globally (World Health Organization, 2021). Psychiatric medications are some of the most difficult and expensive medications to develop and bring to market (Zhu, 2021). As such, infrequently a radically different and novel psychiatric medications come to market, as pharmaceutical companies routinely produce "me too" medications (Becker et al., 2015), medications with similar mechanisms of actions as their predecessors with small molecular changes (Friedman, 2013).

Recently, drug developers began to re-explore psychedelic medicines. The term psychedelic connotes the mind-manifesting abilities these medicines impart (Nichols, 2016; Osmond, 1957) and the concept of using psychedelic medicines in conjunction with therapy as a vehicle to help facilitate change is known as psychedelic-assisted psychotherapy (PAT). Several psychedelic substances have traditions ingrained in Indigenous use and once explored for various physical and mental health applications. Throughout the 1950s and 1960s there was extensive interest in psychedelic medicines including

over a thousand clinical papers published (Grinspoon & Bakalar, 1979), unfortunately much of the research was not conducted by contemporary research standards. This, coupled with political pressure and research failing to show therapeutic benefits, culminated in psychedelic substances being banned with the introduction of the Controlled Substances Act of 1970 (Carhart-Harris & Goodwin, 2017; Penn & Yehuda, 2023).

Currently, most psychedelic medicines are illegal under U.S. federal law, but there is a renewed interest in these substances for diverse applications ranging from various mental health and substance use disorders (MH/SUDs), to physical conditions (including pain), to self-exploration, and recent evidence has indicated an impressive safety profile when PAT is delivered in thoughtfully constructed and monitored settings (Mocanu et al., 2022). One substance, 3,4-methylenedioxymethamphetamine

<sup>1</sup>Carlton J. Spotswood, MSN, APRN, PMHNP-BC, MaineGeneral Medical Center, Augusta, ME, USA

#### **Corresponding Author:**

Carlton J. Spotswood, Integrated Behavioral Health PMHNP, MaineGeneral Medical Center, 35 Medical Center Parkway, Augusta, ME 04345, USA.

Email: carlton.spotswood@maine.edu

Table 1. Historic Nursing Centric Publications Related to Psychedelics and PAT.

Early Nursing Centric Psychedelic Publications	
Psychiatry's Account of Nursing in PAT	Bierer & Buckman (1961) <sup>a</sup>
Accounts of Supporting for PAT	Parley (1964)
Community Health Account	Sankot & Smith (1968); Dansky (1970) <sup>b</sup>
Account of PAT	Berg (1994, 1995)
Contemporary Nursing Centric Published Research	
Serious Medical Conditions & Palliative Care	Rosa, Dorsen, & Penn (2020)
Midwifery	Stein, Penn, Van Hope, Dorsen, & Mangini (2022)
Mental Health and Addiction Medicine	Denis-Lalonde & Estefan (2020)
Holistic Nursing	Rosa, Van Hope, & Matzo (2019)
Nursing Theory	Penn, Phelps, Rosa, & Watson (2021)
Broad Nursing Centric Publication	Penn, Dorsen, Van Hope, & Rosa (2021)
Books Discussing Nursing and Psychedelics	
Narrative Account	Parley (2016)

Note. PAT = psychedelic-assisted therapies.

(MDMA) was granted "breakthrough therapy" status by the FDA for post-traumatic stress disorder (PTSD), meaning if clinical trials meet expectations, it would be fast tracked for approval (Nuwer, 2023). In November 2022, the Multidisciplinary Association for Psychedelic Studies (MAPS) announced completion of their Phase 3 clinical trial and exceeded expectations (MAPS, 2022; Mitchell et al., 2023). As of publication, the FDA has not formally approved MDMA for PTSD, but it could come to fruition as soon as 2024 (Extance, 2023).

Historically, in formal research and colloquially, the terms psychedelic and hallucinogen have been used interchangeably to represent psychoactive substances that induce various changes such as expanded and non-ordinary states of consciousness, psychological changes, and alterations in visual and/or auditory responses (Johnson et al., 2019). For the purpose of this article, I will broadly use the term psychedelic to describe substances used to induce these changes, which include ketamine and MDMA. The specific psychedelic process, in depth analysis of medication's mechanisms of action, and how medicines induce change are outside the scope of this article.

Psychedelic medicines and nursing have a longentwined history despite limited nursing centric publications specifically exploring psychedelics and nursing (Table 1). The purpose of this article is to discuss the current movement of psychedelic medicine, explore nursing's past involvement, and illustrate nursing's ability to play an integral role in the future scalability of PAT. Finally, this article will serve to honor and briefly review relevant information regarding psychedelics and nursing to provide an introductory knowledge base for psychiatric mental health nurses, a beneficial first step to overcome stigmas associated with these novel and potentially life changing medicines.

## Psychedelic-Assisted Psychotherapy

Psychedelic therapies are radically different from conventional psychopharmacological practices, as the medicine is not taken daily and effects can be seen long after ingestion, even after one dose (Goodwin, et al., 2022; Griffiths et al., 2011; Raison et al., 2023). PAT is a modality in which psychedelic medicines are used in conjunction with psychotherapeutic actions to achieve a reduction in physical or psychiatric symptoms or gain previously unseen insights as a catalyst to help facilitate the healing process (Schenberg, 2018). Questions remain as to how much of the healing process is due to the pharmacological actions versus psychotherapeutic interventions. In an early LSD (lysergic acid diethylamide) conference, Robert Murphy addressed this conundrum (Lennard & Hewitt, 1959):

Is LSD a therapy in itself, with the therapeutic relationship functioning merely for support? I believe this is so. Or is the essential therapeutic process the sort of thing Dr. Abramson described in which the therapeutic relationship is the essence of the therapy, and LSD simply facilitates or catalyzes it? These questions underlie a good deal of the discussion here, and are perhaps of more importance than we have recognized. (p. 219)

Arguably, these questions remain unanswered and may never be completely understood, but one thing we do know, PAT is a paradigm shift from the conventional pharmacological practices.

<sup>&</sup>lt;sup>a</sup>Written accounts by psychiatrists in nursing journal. <sup>b</sup>Written under a pseudonym and omitted being a nurse.

Spotswood 3

Regarding psychedelic medicines, there are other aspects to consider beyond pharmacological factors and their dose dependent effects, including the concept of set and setting. Described in *The Psychedelic Experience: A Manual Based on the Tibetan Book of the Dead*,

The drug dose does not produce the transcendent experience. It merely acts as a chemical key—it opens the mind, frees the nervous system of its ordinary patterns and structures. The nature of the experience depends almost entirely on set and setting. (Leary et al., 1964, p. 4)

Albeit the drug's dose does need to be enough to induce a transcendent experience. Set refers to the mind-set of the individual going into their experience and setting refers to the physical and social environment in which the individual embarks on their experience (Hartogsohn, 2017). Potential risks may be mitigated through intentional use of set and setting (Mocanu et al., 2022).

# Three Phases of Psychedelic Therapies

PAT has three distinct phases: preparation, medication, and integration; readers are encouraged to refer to Brennan and Belser (2022) to learn more about this process.<sup>1</sup>

## **Preparation Session**

Preparation begins the moment the individual decides to pursue psychedelic treatment and may be conducted over one or several sessions and in individual or group settings. During preparation, the individual and facilitator(s) meet to discuss individual intentions, expectations of the medicine session(s), informed consent, the individual's comfort level with therapeutic touch, and answer questions (Brennan & Belser, 2022).

## **Psychedelic (Medicine) Session**

The psychedelic session is when medicine is administered according to the mutually agreed upon plan from the preparation phase. During the session, the facilitator serves as the connection between the participant and the external world, providing support to participants throughout the session (Brennan & Belser, 2022; Phelps, 2017). Examples of support include addressing physical concerns that may arise, monitoring vital signs, taking notes, and may include offering reassurance, fluids, tissues, assistance in getting into the bathroom, and so on.

During medicine sessions, participants are encouraged to explore the psychedelic/mystical experience as it unfolds, aided by eye shades and headphones to minimize

outside distractions and facilitate the inward process (Mithoefer et al., 2019). Often, psychotherapy is not conducted during this session as participants are in an expanded state of consciousness,<sup>2</sup> thus unable to actively participate in therapy, matters and themes that arise during the session are explored during subsequent integration session(s) (Mithoefer et al., 2019).

## Integration Session(s)

Often commencing on the day after the medicine session individuals begin to make meaning of their experience and integrate insights gained into their lives (Gorman et al., 2021). Integration may last one to several sessions and in effort to reduce costs, increase access, and build community, integration may be held in group settings (Anderson et al., 2020).

## Psychedelic Treatments and Education

Although the future of PAT is not entirely clear, expectations and tenets for psychedelic education have been proposed. In the first compilation of core competencies for PAT facilitators, based on historical research on psychedelia and spiritual practices, Phelps (2017) propounded an empathetic abiding presence (EAP); trust enhancement; spiritual intelligence; knowledge of the physical and psychological effects of psychedelics; therapist selfawareness and ethical integrity; and proficiency in complementary techniques as necessities. Furthermore, "many of these desired competencies are characteristic of all psychiatric and psychological treatment. However, there is a specificity to the competencies that is unique to the field of psychedelic-assisted psychotherapy and requires specialized training" (Phelps, 2017, p. 460). Phelps (2017) highlighted professional disciplines with backgrounds that may be inherently poised for psychedelic therapies including "licensed medical and mental health professionals or ordained/commissioned clergy and chaplains" (p. 474), nurses were specifically cited later in the publication.

EAP is shown through support, understanding, and the ability to remain calm and composed (Blewett & Chwelos, 1959; Grof, 1980). EAP is important as it has been shown to influence outcomes of psychedelic experiences (Sandison, 1959). Buckman (1967) further expounded the importance of empathy with presence because "the patient is very susceptible to the mood and voice tone of the therapist, nurse, and other people in the treatment unit" (p. 89). Penn, Phelps, Rosa, & Watson (2021) expressed that an EAP is how "the therapist maintains a calm, mindful equanimity to all that arises in the therapy"

(p. 5). Furthermore, Penn, Phelps, Rosa, & Watson (2021) described trust enhancement as "The therapist engenders the trust of the patient and by doing so, creates safe space for the patient's innate healing capacity to emerge" (p. 5). Grof (1980) promulgated,

A good therapeutic relationship helps the patient to let go of psychological defenses, surrender to the experience, and endure the difficult periods of sessions characterized by intense physical and emotional suffering or confusion. The quality of the therapeutic relationship is essential for working through one of the most crucial situations in psychedelic therapy, the crisis of trust. (p. 90)

## **Nursing's Role**

While nurses have played an integral role in psychedelic therapies since they were first explored for psychiatric applications, psychedelic historian Stephen Snelders (2020, "Veluweland" section) asserts "Important participants in these sessions were omitted although their role was crucial- arguably as crucial as that of the psychiatrists, the patients, and of LSD itself. Nurses, whether male or female, were hardly ever mentioned." Early accounts of nursing's involvement were described in mere sentences, minimizing role, or omitted entirely.

Laura Berg<sup>3</sup> (1994, 1995), a nurse in the first contemporary psychedelic research, summarized the limited historical accounts of both her firsthand experiences and nursing's involvement in psychedelic nursing, asserting that nurses are not only capable, but uniquely suited for participating in PAT sessions. Berg contended that nurses are used to spending long lengths of time at the bedside, able to hold vigil during psychedelic sessions, attend to needs as they may arise, and accustomed to remaining present through the entirety of a psychedelic experience (Hammett et al., 1969; Lennard & Hewitt, 1959; Parley, 1964). Historically, the process was thought to be too tiring and time consuming for psychiatrists to manage the entire session on their own, so nursing stepped in (Osmond, 1969; Sandison, 1959).

The nurse's role and supervision by psychiatry during early PAT is not entirely perspicuous and depictions varied; from merely take notes during the session (Lennard & Hewitt, 1959), to encouraging participants to write down thoughts and visualizations as they arose to discuss with the doctor later (Geert-Jörgensen, 1968), to handling patients' material when the physician is not present, and to supporting ventilation (Sandison, 1959). Psychiatry's supervision ranged from frequent in-person or phone contact (Lennard & Hewitt, 1959) to Geert-Jörgensen's (1968) accounts of psychiatrists being in constant contact with the nurse over the phone, to "sometimes pay(ing) a control visit to the patient before the session is over" (p. 197), to leaving the nurse and participant alone for the

4- to 5-hour session. Bierer and Buckman (1961) were critical of nurses, asserting that they were without adequate training and therefore close collaboration was necessary to avoid difficulties or disaster.

Depictions of nursing's role, presence, and approach during early PAT sessions differed greatly, from "a special form of approach by a mature, understanding, sympathetic personality is essential" (Bierer & Buckman, 1961, p. 639), to what we now consider antiquated and downright sexist "in a motherly, consoling, and reassuring way" (Geert-Jörgensen, 1968, p. 197). Furthermore, Osmond (1969) asserted that a psychiatrist could

get a nice, gentle, kind and preferably good-looking nurse to remain with them. Luckily, there are large numbers of such pleasant and capable young ladies about and their presence seems to do (the participant) a great deal of good even if nothing else is done. (p. 222)

These statements were often made by older, White, male psychiatrists during a time when nurses served in subservient roles. Notwithstanding the draconian socio-political undertones in the early psychedelic research and their antiquated depictions of nursing's role, these accounts still contain important points related to nursing's presence and ability to care during psychedelic sessions.

Finally, training and specialization in psychedelic therapies for nurses were rarely discussed and the actual training materials have been lost to time. Sandison (1959) mentioned that at his hospital "the nursing staff of all four wards are all trained in LSD therapy" (p. 125) and "took them (nurses) fully into our confidence as to exactly what they were doing. Their (nurses) role is a difficult one, and it has taken much time to indoctrinate them" (p. 87).

One component of training that was often mentioned was the importance of facilitators having their own experience with psychedelic medicines and expanded states of consciousness (Grof, 1980; Hammett et al., 1969; Lennard & Hewitt, 1959; Sandison, 1959). Kay Parley, an early psychedelic nurse under the tutelage of Humphry Osmond, eloquently and succinctly stated "I noticed when I worked with a nurse that had had LSD, they always seemed to understand their patients better" (Paiement, 2021). These sentiments continue today in research (Aday et al., 2023; Nielson & Guss, 2018) and in PAT educational programs (Dames et al., 2023; Phelps, 2017) insofar as the FDA allowed for experiential opportunities for clinicians providing MDMA-assisted therapy as part of their training (MAPS, 2011, NCT01404754).

## Psychedelic-Assisted Psychotherapy and Nursing Theory

PAT research, improvements in patient outcomes and access, may result with the inclusion of nursing in PAT.

Spotswood 5

Some of the approaches to health care innate to the art of nursing and covered by nursing theory, specifically Jean Watson's Human Caring Science, may account for some of the change's participants experience during PAT that quantifiable science struggles to account for. Specifically, the process of trust and caring, which is often synonymous with nursing and nursing's approach of caring for the whole individual, not solely focusing on curing/treating a malady. Penn, Phelps, et al. (2021) describe this process as

The experience of human caring in medical or psychiatric treatment is often ineffable, implied, and expected, and as such, like the air we breathe, can go unnamed and unnoticed except when it is poorly delivered or is altogether absent. The constituent elements of nursing care are not often explicitly named. That which is not explicitly named cannot be examined or understood, and as such, goes unappreciated, or even unknown. (p. 4)

Furthermore, Penn, Phelps, Rosa, & Watson (2021) delineated Watson's approach to Human Caring Science can be adopted by all disciplines providing PAT, but nurses may find this modality "most approximating the native sensibilities of their profession" (p. 6). This approach to PAT directly relates to nursing theorist Jean Watson's Theory of Human Caring (2008), where she asserts "the body (having) the power at some deep intrinsic level to heal itself." This concept is specifically described within MAPS MDMA for PTSD protocol where the premise of the medicine session is allowing individuals access their own "inner healing intelligence" to heal their symptoms (Mithoefer, 2017). The concept of inner healing intelligence puts the onus of healing from being solely based on the medicine's pharmacology, supporting Leary et al. (1964) posit that psychedelics "merely acts as a chemical key — it opens the mind," whereby returning power to the individual through active participation during treatment. As such, we must consider these additional factors influencing psychedelic effects, contrasting from conventional paradigms.

## **Challenges for the Future of PAT**

In anticipation of PAT becoming FDA-approved, challenges faced include who may facilitate PAT, training expectations, and a bottleneck for training opportunities.<sup>4</sup> In efforts to be proactive, there have been discussions for proposed independent certifications for PAT practitioners, accreditation of PAT educational programs, universally accepted professional practice guidelines (American Psychedelic Practitioners Association, 2023), and codes of ethics for practitioners (Organization of Psychedelic and Entheogenic Nurses [OPENurses], 2023b). Exciting

to many, proposed Food and Drug Administration (FDA, 2023) guidelines cite nurses as potential PAT facilitators, but roles and scope are still undetermined. Traditional nursing curricula do not cover psychedelics nor PAT, but schools of nursing should consider establishing arrangements akin to medical school's collaborative agreements with psychedelic programs (National Academies of Sciences, Engineering, and Medicine, 2022). The first nursing program to do such is a pilot collaborate agreement between Penn Nursing and Columbia's School of Social Work (Penn Nursing, 2022). For now, nurses who wish to learn about this emerging field and prepare for this paradigm shift in health care should explore OPENurses (2023a), a resource for nurses interested in PAT.

#### **Conclusion**

Nursing has a long, albeit underappreciated role in PAT, and as we stand on the cusp of PAT becoming an accepted treatment modality, nurses can be the agents of change needed to facilitate this paradigm shift and playing an integral role in the scalability, deliverability, and success of PAT.

#### **Author's Role**

C.J.S. received speaking fees for presentations at conferences on topics covered in the manuscript. C.J.S. completed all research and writing of the manuscript in its entirety. C.J. S. is a graduate of the California Integral Integral Studies' (CIIS) Center for Psychedelic Therapies and Research., have a continuing education on my website, and author of a book- "The Microdosing Guidebook", which I published through Ulysses Press and receive royalties from.

## **Declaration of Conflicting Interests**

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

### **Funding**

The author(s) received no financial support for the research, authorship, and/or publication of this article.

#### **ORCID iD**

Carlton J. Spotswood D https://orcid.org/0000-0002-8564-8978

#### **Notes**

- The process described within is a generalization and the exact process can differ depending on the medicine, route of administration, dosage being used, the setting or institution providing services, and other factors.
- Psycholytic sessions (Passie et al., 2022), translated as soul-dissolving where the medicine aids in dissolving conflicts of the mind. Psycholytic sessions utilize low to

- medium dose psychedelic medicine in an attempt to eliminate psychological barriers or physical responses that may prevent individuals from accessing or working on certain issues. Since the individual is still at least partially based in reality, during psycholytic therapies the participant and therapist are able to process material as it arises during the session in real time.
- 3. The first PAT nurse in the first psychedelic research after a 25-year hiatus, accompanying Dr. Rick Strassman in his pivotal DMT and psilocybin research for National Institute of Drug Abuse (NIDA) funded study. Berg (1994) described her experience as a "flight nurse," a term she coined for serving as the participant's connection to the conscious world while they explore their inner consciousness and the recapped the limited publications that described nurses in similar roles.
- 4. MAPS estimates needing over 100,000 trained therapists to meet the need of MDMA therapies once approved (Devine, 2022), yet currently there are only ~130 fully trained MAPS Certified MDMA facilitators with an additional ~3,000 facilitators having completed the initial training. To become fully trained facilitators, need to participate in active MDMA session with supervisory oversight. Of the ~3,000 trained facilitators, nurses only account for seven of the fully trained facilitators and another 181 nurses require supervision hours to become fully MAPS certified. (A. Garcia, personal communication, December 5, 2022).

### References

- Aday, J. S., Skiles, Z., Eaton, N., Fredenburg, L., Pleet, M., Mantia, J., Bradley, E. R., Fernandes-Osterhold, G., & Woolley, J. D. (2023). Personal psychedelic use is common among a sample of psychedelic therapists: Implications for research and Practice. *Psychedelic Medicine*, 1(1), 27–37. https://doi.org/10.1089/psymed.2022.0004
- American Psychedelic Practitioners Association. (2023, August). *Professional practice guidelines for psychedelic-assisted therapy*. American Psychedelic Practitioners Association and BrainFutures.
- Anderson, B. T., Danforth, A., Daroff, P. R., Stauffer, C. S., Ekman, E., Agin-Liebes, G., Trope, A., Boden, M., Dilley, P. J., Mitchell, J., & Woolley, J. D. (2020). Psilocybin-assisted group therapy for demoralized older long-term AIDS survivor men: An open-label safety and feasibility pilot study. EClinical Medicine, 27, Article 100538.
- Becker, R. E., Seeman, M. V., Greig, N. H., & Lahiri, D. K. (2015). What can triumphs and tribulations from drug research in Alzheimer's disease tell us about the development of psychotropic drugs in general? *The Lancet Psychiatry*, 2(8), 756–764.
- Berg, L. (1994). Notes from a psychedelic research nurse. Newsletter of the Multidisciplinary Association for Psychedelics Studies, 5(1). https://maps.org/news-letters/ v05n1/05134nrs.html
- Berg, L. (1995). Notes from a psychedelic research nurse: Part II. Newsletter of the Multidisciplinary Association for Psychedelics Studies, 6(1). https://maps.org/news-letters/ v06n1/06117unm.html

- Bierer, J., & Buckman, J. (1961). Marlborough night hospital: Treatment with LSD and group therapy. *Nursing Times*, *57*, 637–639.
- Blewett, D. B., & Chwelos, N. (1959). *Handbook for the thera*peutic use of lysergic acid diethylamide-25 individual and group procedures. https://www.erowid.org/psychoactives/ guides/handbook\_lsd25.pdf
- Brennan, W., & Belser, A. B. (2022). Models of psychedelic-assisted psychotherapy: A contemporary assessment and an introduction to EMBARK, a transdiagnostic, transdrug model. *Frontiers in Psychology*, *13*, Article 866018. https://doi.org/10.3389/fpsyg.2022.866018
- Buckman, J. (1967). Theoretical aspects of LSD therapy. In H. Abramson (Ed.), *The use of LSD in psychotherapy and alcoholism* (pp. 83–100). Bobbs-Merrill.
- Carhart-Harris, R. L., & Goodwin, G. M. (2017). The therapeutic potential of psychedelic drugs: Past, present, and future. Neuropsychopharmacology: Official Publication of the American College of Neuropsychopharmacology, 42(11), 2105–2113. https://doi.org/10.1038/npp.2017.84
- Dames, S., Kryskow, P., Watler, C., Pearl, T., & Allard, P. (2023). Psychedelic-assisted Therapy Training: First Hand experience of non-ordinary states of consciousness in the pursuit of competency [Unpublished manuscript]. https://rootstothrive.com/wp-content/uploads/2023/01/Psychedelic-Therapy-Education\_-Is-the-Experience-of-Psychedelic-Therapy-a-Necessary-Competency-Standard-for-those-Training-to-Provide-Psychedelic-Therapists .pdf
- Dansky, K. H. (1970). Medi-rock: A bridge between two cultures. *The Alumnae Magazine of Johns Hopkins Hospital School of Nursing*, 69(3), 65–68.
- Denis-Lalonde, D., & Estefan, A. (2020). Emerging psychedelic-assisted therapies: Implications for nursing practice. *Journal of Mental Health and Addiction Nursing*, 4(1), e1–e13. https://doi.org/10.2237/jmhan.v4i1.40
- Devine, J. (2022, August 3). The need for 100,000 psychedelic facilitators is real. *LA Weekly*. https://www.laweekly.com/the-need-for-100000-psychedelic-facilitators-is-real/
- Extance, A. (2023, October 31). Positive trial sets stage for therapeutic use of MDMA in US. *Chemistry World*. https://www.chemistryworld.com/news/positive-trial-sets-stage-for-therapeutic-use-of-mdma-in-us/4018114.article
- Food and Drug Administration. (2023). Psychedelic drugs: Considerations for clinical investigations guidance for industry (Draft guidance). Docket: FDA-2023.
- Friedman, R. A. (2013, August 19). A dry pipeline for psychiatric drugs. *The New York Times*. https://www.nytimes.com/2013/08/20/health/a-dry-pipeline-for-psychiatric-drugs.html
- Geert-Jörgensen, E. (1968). Further observations regarding hallucinogenic treatment. *Acta Psychiatrica Scandinavica Supplementum*, 203, 195–200.
- Goodwin, G. M., Aaronson, S. T., Alvarez, O., Arden, P. C.,
  Baker, A., Bennett, J. C., Bird, C., Blom, R. E., Brennan,
  C., Brusch, D., Burke, L., Campbell-Coker, K., Carhart-Harris, R., Cattell, J., Daniel, A., DeBattista, C., Dunlop,
  B. W., Eisen, K., Feifel, D., . . . Malievskaia, E. (2022).
  Single-dose psilocybin for a treatment-resistant episode of major depression. *The New England Journal of*

Spotswood 7

- *Medicine*, *387*(18), 1637–1648. https://doi.org/10.1056/ NEJMoa2206443
- Gorman, I., Nielson, E. M., Molinar, A., Cassidy, K., & Sabbagh, J. (2021). Psychedelic harm reduction and integration: A transtheoretical model for clinical practice. *Frontiers in Psychology*, 12, Article 645246. https://doi.org/10.3389/fpsyg.2021.645246
- Griffiths, R. R., Johnson, M. W., Richards, W. A., Richards, B. D., McCann, U., & Jesse, R. (2011). Psilocybin occasioned mystical-type experiences: Immediate and persisting dose-related effects. *Psychopharmacology*, 218(4), 649–665.
- Grinspoon, L., & Bakalar, J. B. (1979). Psychedelic drugs reconsidered. Basic Books.
- Grof, S. (1980). LSD psychotherapy (4th ed.). MAPS Publishing. Hammett, V., Buckman, J., Godfrey, K. E., Osmond, H., Unger, S., Hermon, H. C., & Grof, S. (1969). (Panel discussion participant) "The Clinical use of psychedelic drugs." Psychedelic Drugs (op city), 234–243.
- Hartogsohn, I. (2017). Constructing drug effects: A history of set and setting. *Drug Science, Policy and Law, 3*, 205032451668332. https://doi.org/10.1177/2050324516683325
- Johnson, M. W., Hendricks, P. S., Barrett, F. S., & Griffiths, R. R. (2019). Classic psychedelics: An integrative review of epidemiology, therapeutics, mystical experience, and brain network function. *Pharmacology & Therapeutics*, 197, 83–102. https://doi.org/10.1016/j.pharmthera.2018.11.010
- Leary, T., Metzner, R., & Alpert, R. (1964). The psychedelic experience; a manual based on the Tibetan book of the dead. University Books.
- Lennard, H., & Hewitt, M. (1959, April 22–24). The study of communication processes under LSD. In H. A. Abramson (Ed.), The use of LSD in psychotherapy, a conference on d-Lysergic Acid Diethylamide (LSD-25) (pp. 199–240). Madison Printing.
- Mental Health America. (2022). *Adult data 2022*. https://mhanational.org/issues/2022/mental-health-america-adult-data
- Mitchell, J. M., Ot'alora, G. M., van der Kolk, B., Shannon, S., Bogenschutz, M., Gelfand, Y., Paleos, C., Nicholas, C. R., Quevedo, S., Balliett, B., Hamilton, S., Mithoefer, M., Kleiman, S., Parker-Guilbert, K., Tzarfaty, K., Harrison, C., de Boer, A., Doblin, R., & Yazar-Klosinski, B. (2023).
  MDMA-assisted therapy for moderate to severe PTSD: A randomized, placebo-controlled phase 3 trial. *Nature Medicine*, 29(10), 2473–2480. https://doi.org/10.1038/s41591-023-02565-4
- Mithoefer, M. C. (2017). A manual for MDMA-assisted psychotherapy in the treatment of PTSD (Version 8.1). Multidisciplinary Association for Psychedelics Studies. https://maps.org/research/mdma/mdma-research-timeline/4887-a-manual-for-mdma-assisted-psychotherapy-in-the-treatment-of-ptsd
- Mithoefer, M. C., Feduccia, A. A., Jerome, L., Mithoefer, A., Wagner, M., Walsh, Z., Hamilton, S., Yazar-Klosinski, B., Emerson, A., & Doblin, R. (2019). MDMA-assisted psychotherapy for treatment of PTSD: Study design and rationale for phase 3 trials based on pooled analysis of six phase 2 randomized controlled trials. *Psychopharmacology*, 236(9), 2735–2745. https://doi.org/10.1007/s00213-019-05249-5

- Mocanu, V., Mackay, L., Christie, D., & Argento, E. (2022). Safety considerations in the evolving legal landscape of psychedelic-assisted psychotherapy. *Substance Abuse Treatment, Prevention, and Policy*, *17*(1), Article 37. https://doi.org/10.1186/s13011-022-00468-0
- Multidisciplinary Association for Psychedelic Studies. (2011, July 28–2022, October 13). Psychological effects of Methylenedioxymethamphetamine (MDMA) when administered to healthy volunteers (MT-1) [Identifier: NCT01404754]. ClinicalTrials.gov. https://clinicaltrials.gov/ct2/show/NCT01404754?term=MDMA&draw=7&rank=56
- Multidisciplinary Association for Psychedelic Studies. (2022). Second maps- sponsored phase 3 trial of MDMA-assisted therapy for PTSD completed. https://maps.org/2022/11/17/mapp2-second-maps-sponsored-phase-3-trial-of-mdma-assisted-therapy-for-ptsd-completed/
- National Academies of Sciences, Engineering, and Medicine. (2022). Exploring psychedelics and entactogens as treatments for psychiatric disorders: Proceedings of a workshop. The National Academies Press. https://doi.org/10.17226/26648
- Nichols, D. E. (2016). Psychedelics. *Pharmacological Reviews*, 68(2), 264–355. https://doi.org/10.1124/pr.115.011478
- Nielson, E. M., & Guss, J. (2018). The influence of therapists' first-hand experience with psychedelics on psychedelic-assisted psychotherapy research and therapist training. *Journal of Psychedelic Studies*, 2(2), 64–73. https://doi.org/10.1556/2054.2018.009
- Nuwer, R. (2023, September 14). MDMA therapy inches closer to approval. *The New York Times*. https://www.nytimes.com/2023/09/14/health/mdma-ptsd-psychedelics.html
- Organization of Psychedelic and Entheogenic Nurses. (2023a). https://www.openurses.org/
- Organization of Psychedelic and Entheogenic Nurses. (2023b). Mission and intent. https://www.openurses.org/code-of-ethics
- Osmond, H. (1957). A review of the clinical effects of psychotomimetic agents. *Annals of the New York Academy of Sciences*, 66(3), 418–434. https://doi.org/10.1111/j. 1749-6632.1957.tb40738.x
- Osmond, H. (1969). Alcoholism: A personal view of psychedelic treatment. In R. E. Hicks & P. J. Fink (Eds.), *Psychedelic drugs: Proceedings of a Hahnemann Medical College and Hospital symposium* (pp, 217–225). Grune & Stratton.
- Paiement, G. (2021, April 14). Psychedelic Saskatchewan: Kay Parley. *Chacruna*. https://chacruna.net/psychedelic-saskatchewan-kay-parley/
- Parley, K. (1964). Supporting the patient on LSD day. The American Journal of Nursing, 64(2), 80–82. https://doi. org/10.2307/3452964
- Parley, K. (2016). *Inside the mental: Silence, stigma, psychiatry, and LSD*. University of Regina Press.
- Passie, T., Guss, J., & Krähenmann, R. (2022). Lower-dose psycholytic therapy: A neglected approach. *Frontiers in Psychiatry*, 13, Article 1020505. https://doi.org/10.3389/fpsyt.2022.1020505
- Penn, A. D., Dorsen, C. G., Van Hope, S., & Rosa, W. E. (2021). Psychedelic-assisted therapy: Emerging treatments

- in mental health disorders. *The American Journal of Nursing*, *121*(6), 34–40. https://doi.org/10.1097/01.NAJ. 0000753464.35523.29
- Penn, A. D., Phelps, J., Rosa, W. E., & Watson, J. (2021). Psychedelic-assisted psychotherapy practices and human caring science: Toward a care-informed model of treatment. *The Journal of Humanistic Psychology*. Advance online publication. https://doi.org/10.1177/00221678211011013
- Penn, A. D., Phelps, J., Rosa, W. E., & Watson, J. (2021). Psychedelic-assisted psychotherapy practices and human caring science: Toward a care-informed model of treatment. *The Journal of Humanistic Psychology*. 0(0). https:// doi.org/10.1177/00221678211011013
- Penn, A., & Yehuda, R. (2023). Preventing the gaps in psychedelic research from becoming practice pitfalls: A translational research agenda, *Psychedelic Medicine*, *1*(2), https://doi.org/10.1089/psymed.2023.0017
- Penn Nursing. (2022). Penn nursing & Columbia School of Social Work team up to educate social workers & nurses about psychedelic-assisted therapy. https://www.nursing.upenn.edu/details/news.php?id=2180
- Phelps, J. (2017). Developing guidelines and competencies for the training of psychedelic therapists. *Journal of Humanistic Psychology*, 57(5), 450–487. https://doi.org/10.1177/0022167817711304
- Raison, C. L., Sanacora, G., Woolley, J., Heinzerling, K., Dunlop, B. W., Brown, R. T., Kakar, R., Hassman, M., Trivedi, R. P., Robison, R., Gukasyan, N., Nayak, S. M., Hu, X., O'Donnell, K. C., Kelmendi, B., Sloshower, J., Penn, A. D., Bradley, E., Kelly, D. F., & Griffiths, R. R. (2023). Single-dose psilocybin treatment for major depressive disorder: A randomized clinical trial. *JAMA*, 330(9), 843–853. https://doi.org/10.1001/jama.2023.14530
- Rosa, W. E., Dorsen, C. G., & Penn, A. D. (2020). Fostering nurse engagement in psychedelic-assisted therapies for

- patients with serious illness. *Journal of Palliative Medicine*, 23(10), 1288.
- Rosa, W. E., Van Hope, S., & Matzo, M. (2019). Palliative nursing and sacred medicine: A holistic stance on entheogens, healing, and spiritual care. *Journal of Holistic Nursing*, *37*(1), 100–106. https://doi.org/10.1177/0898010118770302
- Sandison, R. (1959, April 22–24). The nature of the psychological response to LSD. In H. A. Abramson (Ed.), *The use of LSD in psychotherapy, a conference on d-Lyser-gic Acid Diethylamide (LSD-25)* (pp. 81–145). Madison Printing.
- Sankot, M., & Smith, D. E. (1968). Drug problems in the Haight-Ashbury. *American Journal of Nursing*, 68(8), 1686–1689.
- Schenberg, E. E. (2018). Psychedelic-assisted psychotherapy: A paradigm shift in psychiatric research and development. Frontiers in Pharmacology, 9, Article 733. https://doi. org/10.3389/fphar.2018.00733
- Snelders, S. (2020, November 18). Kin Spruijt: A psychedelic nurse in a Dutch Psychiatric Clinic. *Chacruna*. https://chacruna.net/a-psychedelic-nurse-in-a-dutch-psychiatric-clinic/
- Stein, C. A., Penn, A. D., Van Hope, S., Dorsen, C. G., & Mangini, M. (2022). The pharmacology and clinical applications of psychedelic medicines within midwifery practice. *Journal of Midwifery & Women's Health*, 67(3), 373–383. https://doi.org/10.1111/jmwh.13371
- Watson, J. (2008). *Nursing: The philosophy and science of caring* (Revised ed.). University Press of Colorado, Boulder.
- World Health Organization. (2021). *Depression*. https://www.who.int/news-room/fact-sheets/detail/depression
- Zhu, T. (2021). Challenges of psychiatry drug development and the role of human pharmacology models in early development: A drug developer's perspective. *Frontiers in Psychiatry*, *11*, Article 562660. https://doi.org/10.3389/fpsyt.2020.562660