Psilocybin-Assisted Therapy for Cancer-related Mental Health Palliation: The State of the Science

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Objectives

Upon completion of this session, participants shall be able to:

1. Describe the current state of the science relative to psilocybin-assisted psychotherapy for managing cancer-related psychological distress in patients with cancer.

2. Describe the current evidence-based practice role of psilocybin-assisted psychotherapy for managing cancer-related psychological distress in patients with cancer in the clinical setting to respond to patients' inquiries in this regard.

Background

- Sustained psychological distress in patients with cancer contributes to suffering.

- Growth of psycho-oncology has improved quality of life (QOL) for countless individuals, yet up to 40% of patients report clinically significant mood disorders.

- Adverse mental health is associated with poor outcomes, such as reduced survival, lowered QOL, heightened perceived symptoms including pain, and non-adherence to treatment.

Background

- Psilocybin is a naturally occurring compound derived from species of mushrooms which can induce entheogenic experiences.

- Interest in the role of psilocybin-assisted therapy for treatment-resistant anxiety and depression is growing.

Purpose

- The purpose of this review is to synthesize current evidence on psilocybin-assisted therapy in relation to mental health outcomes among patients with cancer.

Methods

- Scoping review guided by Arksey & Malley's Framework (2005)

- Five databases were searched: CINAHL, PsycINFO, Web of Science, Cochrane, and PubMed

- Key search terms included "psilocybin" and "cancer"

- Year of publication was limited to 2000-2022

Methods

- Table 1. Eligibility Criteria

Inclusion	Exclusion
Patients with cancer	Non-cancer groups
Evaluated the use of psilocybin-assisted psychotherapy	Included other hallucinogenic substances
Reported outcomes of psychopathology (sustained depression, anxiety, distress)	Psychiatric diagnoses unrelated to mental health and cancer other psychological treatments
Published in English	Provider focus and attitudes
	Protocols, pharmaceutical trials, commentaries

Methods

- **Figure 1**. Preferred Reporting Items for Scoping Reviews (PRISMA-Scr).

- Across four databases, a total of **359 articles** were retrieved.

- After the removal of duplicates and screening against the eligibility criteria, **8 studies** were included in the review.
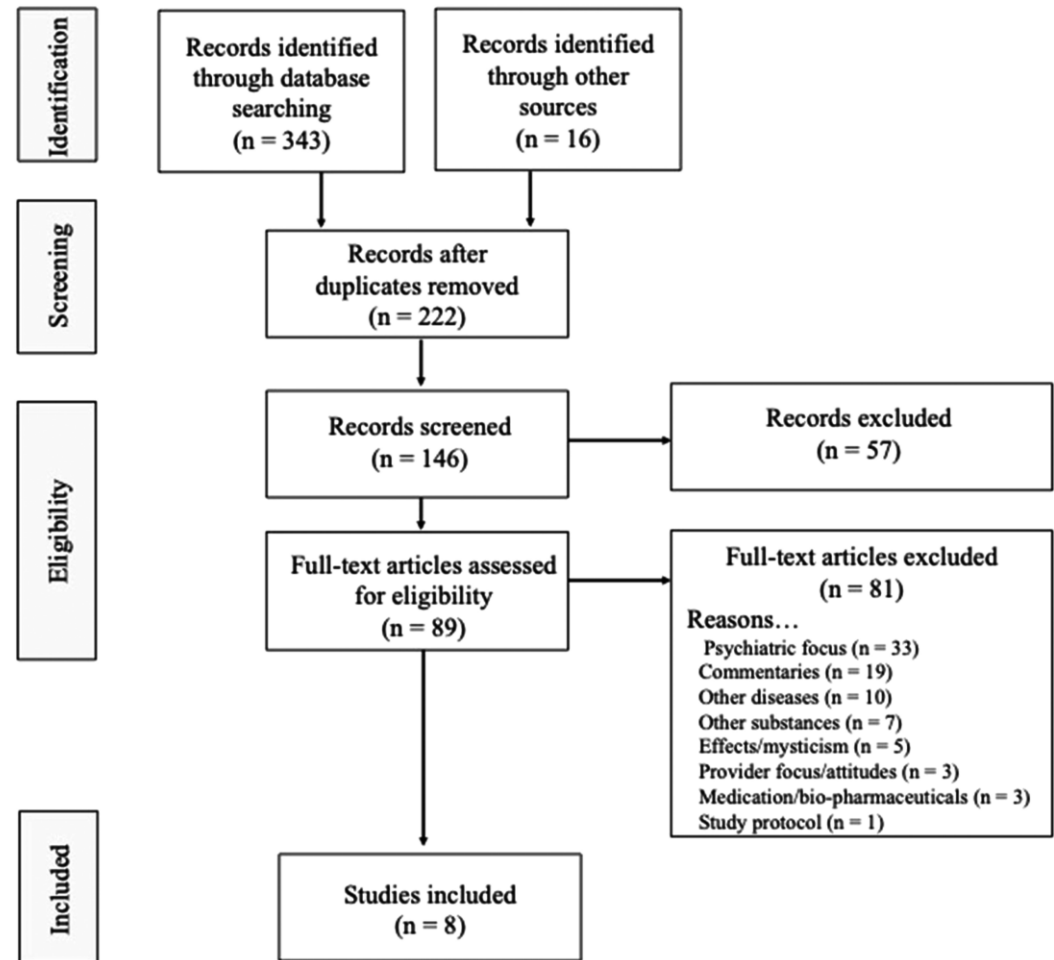

Identification

Records identified through database searching
(n = 343)

Records identified through other sources
(n = 16)

Screening

Records after duplicates removed
(n = 222)

Eligibility

Records screened
(n = 146)

Records excluded
(n = 57)

Full-text articles assessed for eligibility
(n = 89)

Full-text articles excluded
(n = 81)
Reasons...
 Psychiatric focus (n = 33)
 Commentaries (n = 19)
 Other diseases (n = 10)
 Other substances (n = 7)
 Effects/mysticism (n = 5)
 Provider focus/attitudes (n = 3)
 Medication/bio-pharmaceuticals (n = 3)
 Study protocol (n = 1)

Included

Studies included
(n = 8)

Figure 1. PRISMA-Scr

Results

- **Study Characteristics**

    Across the eight studies:

    - Most participants were white and had relatively high levels of education.

    - Types and stages of cancers varied.

    - Sample sizes ranged from 4 to 51 participants.

    - Study designs included: qualitative (interviews [n=2]); quantitative (pilot [n=1], random double blind [n=2], secondary data analysis [n=1], and mixed methods [n=2])

Results

- All studies followed a similar procedure including a preparatory session, psilocybin-assisted therapy, and follow-up integration sessions.

- Well-trained psychedelic-assisted therapists facilitated the sessions.

Results

- Participants reported varying personalized accounts centered on death acceptance, reflection, trauma resolution, and spirituality.

- Additionally, a single psilocybin-assisted therapy experience was associated with acute and enduring positive effects on suicidal ideation and loss of meaning among cancer patients with psychiatric and existential distress.

Results

- Psilocybin-assisted therapy was found to modify depression and anxiety symptoms, sustained at 6 months, 3.2- and 4.5-years post-treatment.

Results

- Across studies, a single session of psilocybin-assisted therapy was found to be safe.

- No serious adverse effects were reported after participating.

Conclusions

- Psilocybin-assisted therapy is a **promising treatment** for cancer-related psychological distress.

- It is essential that **oncology providers are informed** on the state of the science regarding this emerging treatment.

Conclusions

- Future research should incorporate **representative, racially, culturally, and socio-economically diverse samples**, and capture **age-developmental differences** in patients with cancer.

- Future work to **explore cancer patient's knowledge and attitudes** related to psilocybin-assisted therapy could be a useful step in in **implementation**.

Thank you!

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