



Educational Intervention to Improve Understanding and Willingness to Use Ketamine in a Supportive Oncology Setting

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Statement of the Problem

- Treatment-resistant depression and suicidality is common in an oncology setting.
- There are limited interventions that can quickly alleviate severe depression and suicidal ideation.
- Ketamine can safely and effectively reduce suicidal ideation and improve symptoms of severe depression.

Background/Literature Review

- The rate of completed suicide in an oncology population is twice that of the general population.¹
- A single dose of intravenous (IV) ketamine is safe and effective at rapidly, though temporarily, decreasing suicidal ideation and significantly improving severe depression symptoms.²
- Spravato® (esketamine) has recently been FDA approved for treatment-resistant depression with suicidality.
- Research has found that ketamine assisted psychotherapy can increase the durability of its' effects.³

Purpose/Aims

This educational project's goal is to improve health care providers' understanding of and reduce barriers to ketamine's use in patients with treatment-resistant depression with suicidal ideation in a supportive/palliative oncology setting.

Aims:

1. Educate oncology staff on ketamine's use in treatment-resistant depression
2. Design a treatment protocol for ketamine and esketamine use in a chemotherapy infusion center
3. Advocate for use of ketamine to St. Luke's Pharmacy/Therapeutics Committee
4. Determine if an educational intervention improved health care provider's understanding of ketamine

Methods

- Four 45-min hybrid in-person/online lectures were given to ambulatory oncology health care providers at St. Luke's Cancer Institute in Spring 2023.
- Forty-five health care providers attended the presentation.
- A 10-item survey was designed and distributed pre and post lecture.
- Data analyzed using Excel to determine if interventions increased knowledge and willingness to recommend ketamine.
- Concurrently, an abbreviated lecture and recommended protocol was presented to both Oncology and St. Luke's System-wide Pharmacy/Therapeutics Committees asking for approval to use ketamine in our setting.

Results

Survey Item (1=strongly agree, 2=agree, 3=neutral, 4 = disagree, 5=strongly disagree)	Pre Mean (SD) N=45	Post Mean (SD) N=43
I am worried about use of ketamine in the cancer institute.	3.52 (0.87)	3.98 (0.76)
I think screening our oncology patients for distress is important.	1.27 (0.44)	1.26 (0.49)
Ketamine is a safe effective treatment.	2.58 (0.58)	2.02 (0.66)
We should offer IV ketamine for treatment resistant depression at the cancer institute.	2.47 (0.75)	1.86 (0.82)
We should offer ketamine assisted psychotherapy to our patients with existential distress.	2.40 (0.71)	1.63 (0.78)
I would be interested in pursuing further education to work with ketamine in my discipline or collaborate with others who do so.	2.16 (0.84)	2.02 (0.93)
I would be interested in learning more about integrative psychiatry to address root causes of depression	1.69 (0.63)	1.72 (0.73)
I am interested in attending a healing the healers retreat to address moral injury, compassion fatigue, secondary trauma	2.18 (1.27)	2.12 (1.12)
I would recommend either IV ketamine or intranasal esketamine (Spravato) to patients I am working with now.	2.73 (0.77)	2.19 (0.84)
I am interested in learning more about psilocybin for treating existential distress in our oncology patients.	2.30 (1.01)	2.00 (0.93)

Implications

- A short educational intervention can increase knowledge about novel treatments and increase health care providers' willingness to provide them in a supportive and palliative oncology setting.
- Both IV ketamine and intranasal esketamine have been approved for treatment-resistant depression and suicidality at St. Luke's Cancer Institute.

Limitations

- These sessions were offered in a single site ambulatory oncology setting with limited physician participation.
- To increase physician participation additional on-line sessions could be offered.

Acknowledgements/References

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References:

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3. Drozd SJ, Goel A, McGarr MW, et al. Ketamine assisted psychotherapy: A systematic narrative review of the literature. *J Pain Res.* 2022;15:1691-1706.



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