

# Decreasing the use of Benzodiazepines and Sedative Hypnotics in post operative older adults

Amaka Opute DNP, APRN, ACNP-BC

UTSW Medical Center Dallas – DNP of Color

## Background

Prevalence rates of Benzodiazepines and Sedative hypnotics

- 32% of adults >65years old are prescribed Benzodiazepines
- 59% of adults >65years old with psychiatric disorders are prescribed Benzodiazepines
- 25% of newly prescribed Benzodiazepines are continued 90days after discharge from the hospital
- Routine prescribing of Benzodiazepine and sedative hypnotics in older adults as first line for sleep has contributed to:
  - Prolonged hospital stay
  - Increased fall rates
  - Increased development of delirium
  - Increased use of patient safety sitters

## Objectives

- Decrease prescribing of Benzodiazepines and sedative hypnotics by 5% within 90days of project initiation
- Increase the prescribing of Melatonin as the first line for sleep

## Methods

- Quality improvement Project
- Pre and post test survey design
- Retrospective comparison of Benzodiazepines and Sedative hypnotics prescribing patterns
- Retrospective comparison of Melatonin prescribing patterns

### References or Qr Code

Al-Aama, T., Brymer, C., Gutmanis, I., Woolmore-Goodwin, S. M., Esbaugh, J., Dasgupta, M. Melatonin decreases delirium in elderly patients: A randomized, placebo-controlled trial. *Int J Geriatr Psychiatry* (2011) 26(7):687–94.10.1002/gps.258  
 Naijar, M., Sulaiman, S. A., Alieraisy, M., & Balubaid, H. (2018). The impact of a combined

## Intervention

- Educational in-services for advanced practice providers, residents and nursing staff with focus on a)the adverse effects of benzodiazepine use amongst older adults b) Choosing wisely guidelines c) use of melatonin as a first line medication for sleep d) non pharmacologic measures of sleep promotion.
- Continuous transparent prescribing monitoring of providers, coupled with further education for specific providers as deemed necessary.

## Measures & Analysis

- Total # of patients prescribed Benzodiazepines and Sedative hypnotics monthly in the pre vs post implementation phase
- Total # of patients prescribed Melatonin in the pre vs post implementation phase
- Rate of delirium on the unit measured by # of patient safety sitter hours utilized

## Data Analysis

- Descriptive analysis and statistical analysis of the two data sets to monitor the impact of the intervention

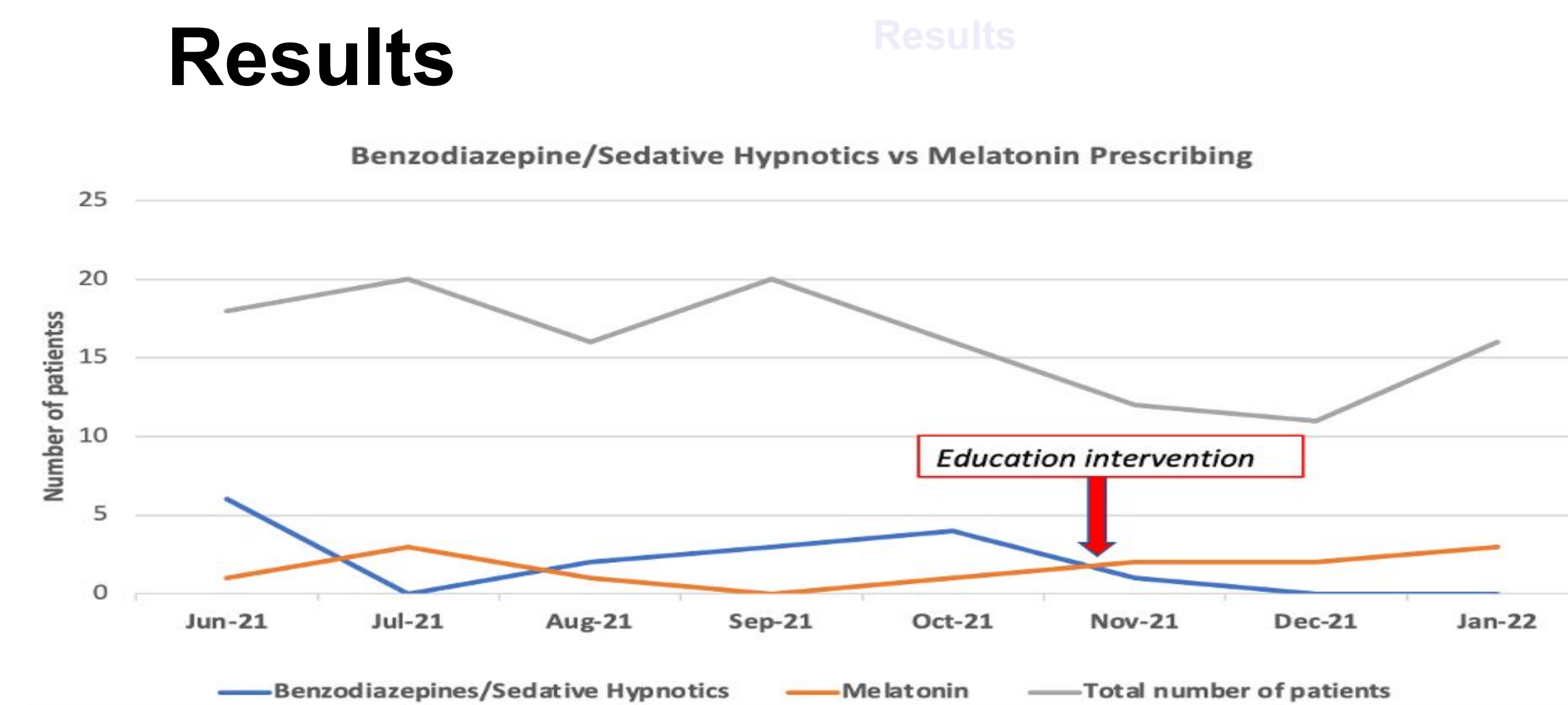
## Results

- 33% decreasing in prescribing of Benzodiazepine/sedative hypnotics
- 12% increase in prescribing of Melatonin
- 28% decrease in the use of patient safety sitter

## Next steps

Replication of this project on a different unit for a prolonged period with the initiation of a revised order-set that would replace benzodiazepine with melatonin using an electronic order set

## Results



## Implications

- Educational intervention can be effective in changing prescribing practices amongst providers
- Similar approach could effectively change prescribers' behavior over a period of practice.

## Conclusion

Provider education and nursing education, coupled with transparent monitoring of prescribing practices, decreased the prescription of benzodiazepines and sedative-hypnotics.