"Have no fear, we have an infographic right here!"
Transforming resident management of hyperactive delirium in a community teaching hospital: a quality improvement project.

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Background

"Agitation" on medicine floors is a nuanced complaint often requiring a psychiatry consult. Unfortunately, we do not have overnight psychiatry coverage at our community teaching hospital.

An overnight call for agitation due to hyperactive delirium can be efficiently fielded by a medicine resident confident in assessing and treating delirium.

Methods

Our psychiatry CL service collaborated with medicine to develop an infographic algorithm enhancing the education of medicine residents regarding agitation in the setting of hyperactive delirium.

This infographic was posted near medicine resident workstations, and a five-point survey measuring medicine resident confidence regarding delirium was issued before and after the infographic intervention.

Infographic QR Code

"Agitation" could be Delirium!

Delirium

My patient has sudden onset of fluctuating...
- ✓ Impaired consciousness
- ✓ Impaired attention
- ✓ Impaired cognitive function
- ✓ Agitation, hallucinations, and/or delusions

My patient does not have...
- Dementia: gradual insidious onset, less fluctuation
- Psychosis: more constant hallucinations, delusions, consciousness & orientation

My patient has an underlying...
- ✓ Medical cause (ex: infection, metabolic disturbance, CNS issue, s/p surgery)
- ✓ Substance cause (ex: medications, narcotics, withdrawal)
- ✓ Environmental cause (ex: sleep, pain, stress)

...requiring treatment while managing agitation!

I will first try reducing agitation by...
- ✓ Opening window blinds in AM (daily nursing communication order, during pre-rounds)
- ✓ Verbally reorienting patient, regular calls/visits from family
- ✓ Neither endorsing nor challenging delusions/hallucinations
- ✓ Evaluating visual/hearing impairment (eyeglasses, hearing aids)
- ✓ Having visible clock, visible calendar with current day marked
- ✓ Avoiding restraints, instead mobilizing patient

If agitation continues interfering with patient care/safety, then I will consider...
- Haldol
  - PO/IM/IV 0.5 to 1mg PRN q30min
  - Max total dose: 5mg/day
  - Side effects: QTc prolongation, EPS
- Zyprexa
  - PO/IM 2.5 to 5mg qD or PRN q30m
  - Max total dose: 20mg/day
  - Side effect: metabolic syndrome
- Seroquel
  - PO 12.5mg BID, or 25 to 50mg qHS
  - Max total dose: 200mg/day
  - Side effect: sedation
- Ativan (if NMS history, Benzo/ETOH withdrawal, or as Haldol adjunct)
  - PO/IM/IV 0.5 to 1mg qD or qHS
  - Side effects: worsen agitation, respiratory depression, sedation

Sedation: low ↑ EPS: none

Formulated by John Lotfi, MD - Psychiatry Resident
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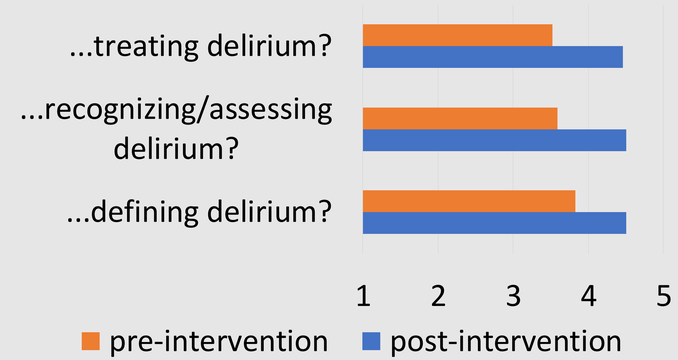
Results

How confident are you in...



Discussion

The mean scores for the post-intervention survey measuring medicine resident confidence in treating, assessing and defining delirium improved by about one point.

This highlights the potential for quick reference guides in the form of infographic algorithms to instill confidence in a resident's ability to manage complex issues such as agitation in the setting of hyperactive delirium.

References

Marcantonio, ER. Delirium in Hospitalized Older Adults. The New England Journal of Medicine. 2017;377(15):1456-66.

Oh ES, Fong TG, Hshieh TT, et al. Delirium in Older Persons: Advances in Diagnosis and Treatment. JAMA. 2017;318(12):1161-1174.

Sadock BJ, Sadock VA, Ruiz P. Kaplan and Sadock's Synopsis of Psychiatry: Behavioral Sciences/Clinical Psychiatry. 11th ed. Philadelphia: Wolters Kluwer; c2015. Chapter 21.2, Delirium; p. 697-704.