UC DAVIS HEALTH

Barriers to Delirium Recognition and Assessment Among Critical Care Clinicians During the COVID-19 Pandemic

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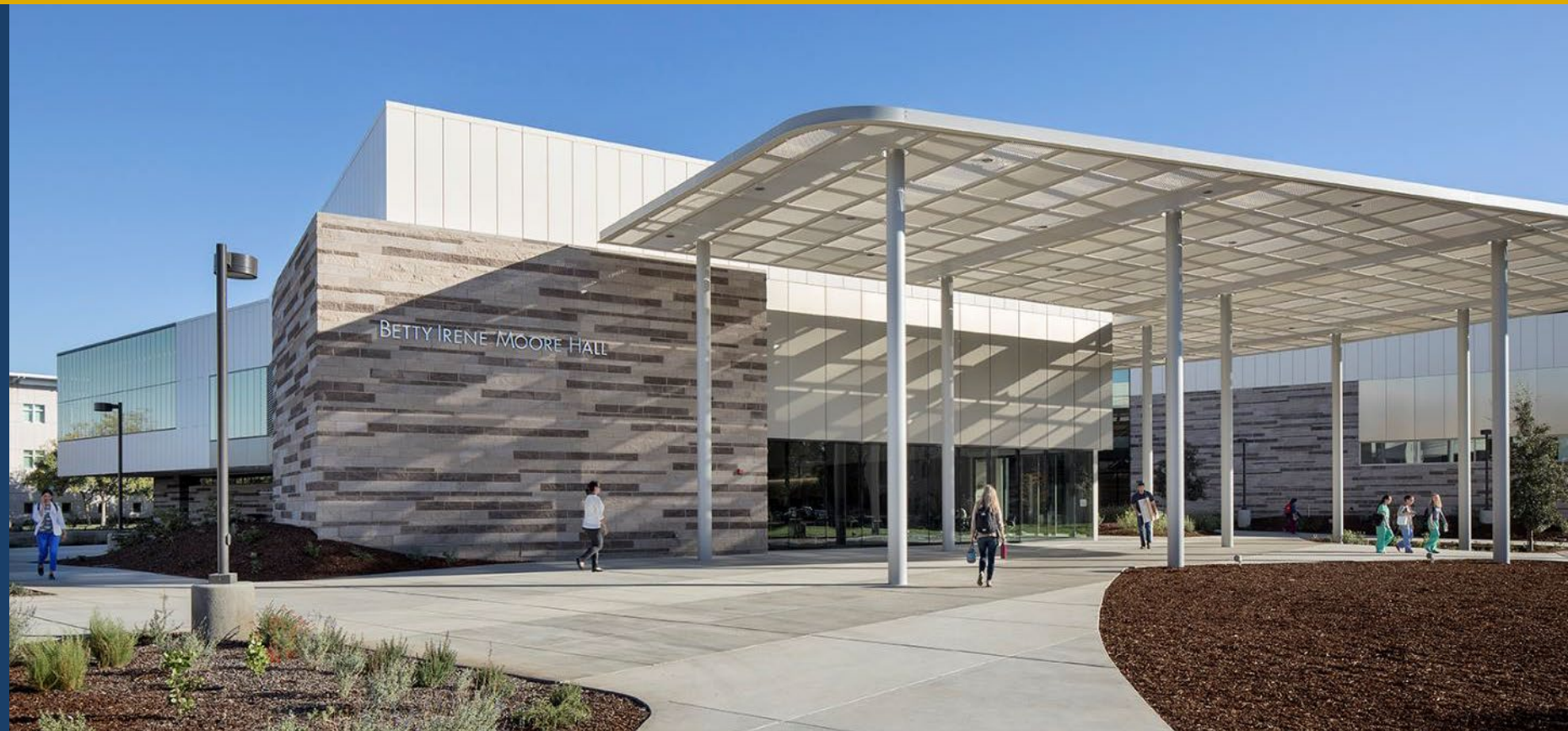


Background- Delirium

- An acute, fluctuating confusional state[1,6]
- Referred to as acute delirium, ICU delirium, or ICU psychosis.[1]
- Most common psychiatric disorder in hospitals[1]
- In adults, rates of delirium vary based on disease process and location:[2]
  - 80% in ICU
- Increased risk for:[2-6]
  - PTSD
  - Prolonged cognitive dysfunction
  - Hospital length of stay
  - Staffing needs
  - Institutionalization
  - Mortality risk
- $4 to $152 billion in costs annually[1]

Figure 1

Background- Prevention and Management

- Early and continued screening using a validated tool[8]
  - Recommended for any patient with one or more risk factors.
- Utilize multicomponent prevention bundles
  - ABCDEF Bundle[9]
  - Associated with reduced delirium rates, length of stay, and mortality.[10]

Figure 3

Background- COVID-19

- SARS-CoV-2 aka COVID-19[11]
- 30 million cases, 550,000 deaths in the US[11]
- Cumulative hospitalization rate of 417.2 per 100,000[12]
- Adults >65 years at greatest risk for severe disease, ICU admission, and death[13]
- Hospitalized patients require use of isolation and PPE[13-14]

Figure 4

Significance of the Problem

Figure 5

- Delirium persists despite effective prevention and management methods.
- Other health professions encounter delirium.
- The COVID-19 pandemic might influence delirium recognition and assessment practices among clinicians.

Aims

Figure 6

- Describe and compare the differences between critical care clinicians in the roles, responsibilities, and perceived barriers to delirium recognition and assessment.
  - Physical therapists (PTs), physical therapy aides (PTAs), physicians, registered nurses (RNs), and respiratory therapists (RTs)
- Explore the impact of the COVID-19 pandemic on the delirium recognition and assessment practices.

Methods

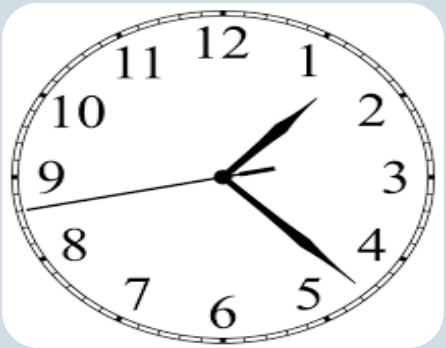
- Quantitative, cross-sectional
- “Nursing Practices and Perceptions Towards Delirium in the Intensive Care Unit” survey[15]
- Participants contacted via e-mail
- Large, academic hospital
- Inclusion criteria:
  - PTs, PTAs, physicians, RNs, and RTs
  - Work on-site > 6 months in the adult ICU setting
- Independent variable: Clinician role
- Dependent variables: Delirium assessment type and frequency, barriers to assessment, delirium assessment among patients with COVID-19
- Fisher’s exact test
- Logistic regression

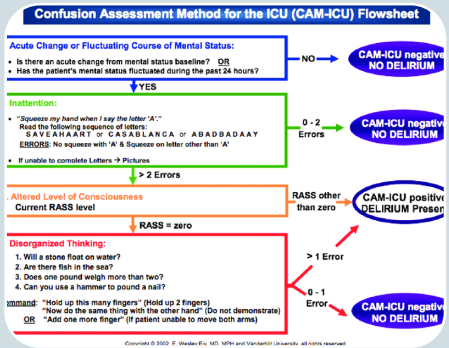
Figure 7

Results- Demographics

Sample size	• 114 participants
Age	• 75.5% were ages 18-44
Gender	• 77% female
Clinical Role	• 74.6% RNs, 10.5% RTs, 8.7% PTs/PTAs, 6.1% Physicians
Unit/Clinical Area	• 22.8% MICU, 18.4% Variable, 15.8% MSICU
COVID-19	• 88.6% cared for patients with COVID-19

Results- Delirium Assessment Type and Frequency





Ability to follow commands

- Most clinicians used this method more than once per shift

Orientation

- RNs used this method most frequently during a shift
- Other professions used it one time per shift

CAM-ICU

- Most RNs used this method once per shift
- Other professions never or rarely used it

Agitation/RASS

- RNs used this method more than once per shift
- Other professions never or rarely used it

Results- Barriers to Assessment

Assessment tools are difficult to interpret in intubated patients.	Most professions were neutral	More RTs agreed
I do not feel confident in my ability to use delirium assessment tools.	PTs/PTAs and RNs felt more confident	Physicians and RTs were neutral or not confident
I am not required to screen for delirium in my ICU/care area.	Physicians and RNs indicated that they were required to screen	PTs/PTAs and RTs were not required to screen
Other clinicians do not use my assessment in their decision-making	Most professions' responses varied	Physicians felt that other clinicians used their assessments

Results- Perceptions of Delirium

Delirium is a common response in the ICU environment.
- Most clinician groups, except for RTs, agreed

Delirium is challenging to assess in ICU patients.
- High variance among all professions

The presence of delirium interferes with my ability to provide patient care.
- All professions felt neutral

The presence of delirium increases my workload.
- Physicians agreed while other professions felt neutral.

Rating of distress levels when caring for a patient experiencing delirium.
- Physicians and RNs felt high levels of distress, while PTs/PTAs and RTs felt lower levels of distress.

Results- COVID-19 and Delirium Assessments

Importance of assessing for delirium	PTs/PTAs and RNs felt that assessments were important
Prioritization of delirium assessments over other assessments or interventions	Almost all clinicians felt assessments were low to moderate priority
Level of interference with providing delirium assessments and interventions	Physicians and RNs felt moderate to total interference
Levels of distress while caring for patients with COVID-19 and delirium	RNs felt moderate to high levels of distress
Rates of delirium among patients with COVID-19 versus other ICU patients	All professions felt that rates were about the same

Results- Comparison of RNs to Other Professions

Assessment Type

More likely to use CAM-ICU and ability to follow commands

Barriers to Assessment

More likely to feel confident with assessments and able to document assessments

More likely to rate distress levels as high

COVID-19 and Delirium

More likely to feel higher levels of interference

Discussion

- Validated assessments were not frequently used
- All professions used other methods
- Clinicians perceived barriers with assessment tools
- RNs and physicians felt responsible for providing assessments
- Nearly all professions felt that their assessment was not used in decision-making
- COVID-19 deprioritized and interfered with delirium assessments
- Delirium is stressful

Figure 8

Implications

- Opportunities to train/educate clinicians on delirium and use of validated tools
- Inclusion of additional professions will help to detect or possibly prevent delirium
- Inclusion of additional professions will increase agency and buy-in

Figure 9

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Image References

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