# ICU Delirium: Detection with and without CAM-ICU Screening

Kiara Felix BSN, RN, Anita Larkin MSN, CMSRN, Kathryn Lynn BSN, RN, & Latoya Reed, BSN, RN Faculty Advisor: Dr. Tracy McClinton, DNP, AGACNP-BC, APRN, EBP-C College of Nursing - The University of Tennessee Health Science Center - Memphis, TN



COLLEGE OF NURSING

## Purpose

The purpose of this Doctor of Nursing Practice scoping review is to examine the current literature on the screening of Intensive Care Unit (ICU) delirium using the Confusion Assessment Method (CAM)-ICU tool versus non-CAM-ICU screening tools or no screening tools.

### **Specific Aims**

- Examine impact of length of stay in the ICU and hospital
- Examine the impact on mortality

# Methods

### **Scoping Review of the Literature**

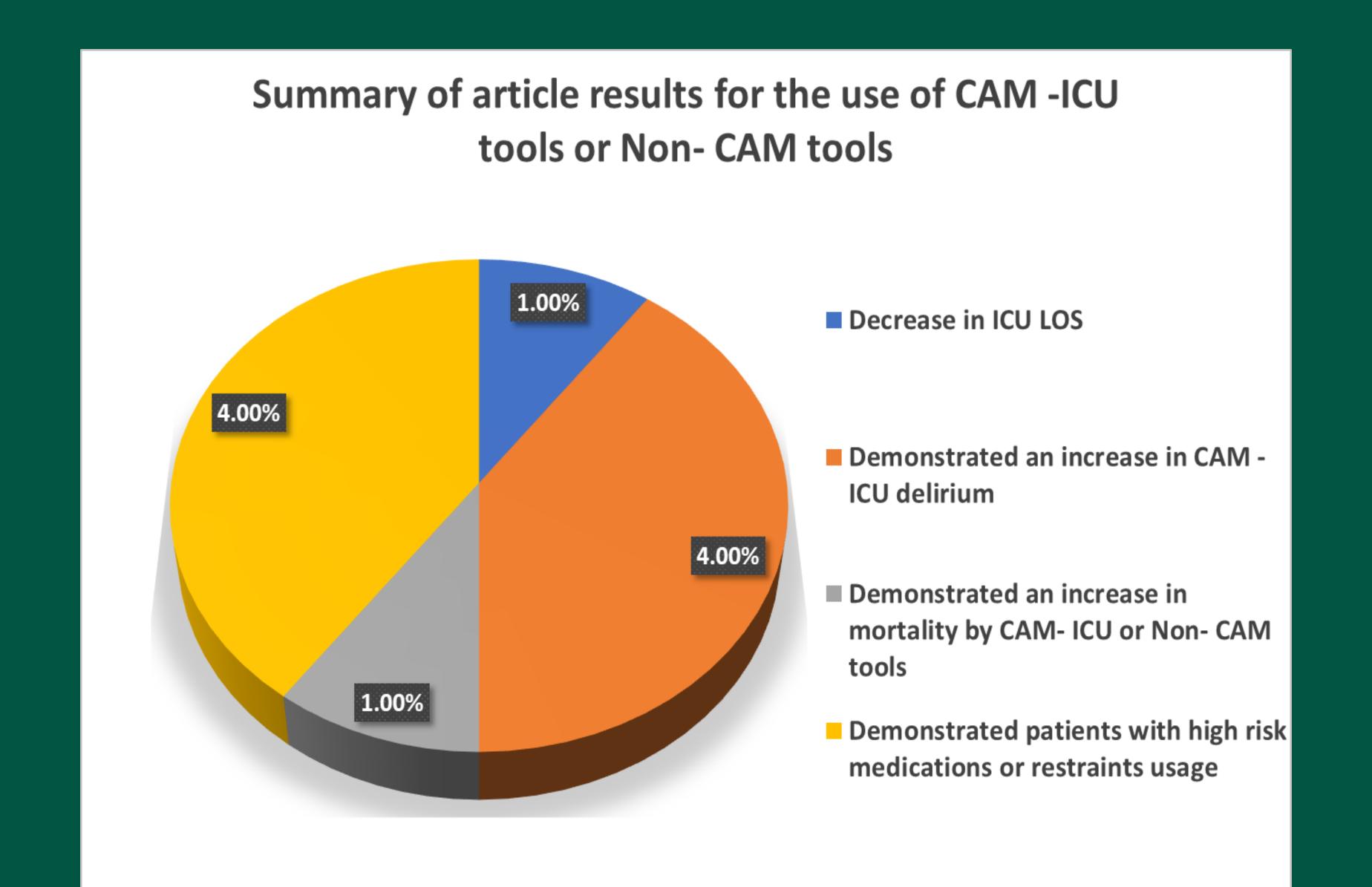
- Databases Searched
  - PubMed, CINAHL, and Medline
- **Search Criteria** 
  - Subjects were adults 18 years and older admitted to an ICU setting
  - Any race, ethnicity or gender
  - ICU and/or hospital LOS
  - Mortality
  - Medications or restraint usage
  - Delirium screening tool efficacy
- Selection of Sources of Evidence
  - Rapid Critical Appraisal (RCA)
  - Nine articles met search criteria

### Data Collection Process

- Articles from RCA placed in a synthesis table
- Evidence and outcomes summarized in the synthesis table
- ICU and hospital length of stay (LOS) for CAM-ICU, ICU and hospital LOS for non-CAM tool delirium mortality with delirium, mortality without delirium, restraint usage, high-risk medication usage, effectiveness of screening tool, and screening tool usage
- Supporting evidence was identified in the nine articles.

# Background

- Delirium is a type of brain dysfunction characterized by fluctuating cognitive changes, disorientation, memory impairment, and changes in awareness.
- 30% 80% of ICU patients have delirium.
- Delirium is associated with longer hospital and ICU stays, higher mortality, and increased costs.
- A bundled care strategy that includes using the CAM-ICU tool can help improve patient outcomes.



# Synthesis of Results

- Evidence supports the utilization of the CAM-ICU tool or any screening tool is effective in detecting delirium.
- More research is needed to establish CAM-ICU as the gold-standard for delirium screening, detection and early

### Results

### **Summary of the Articles' Results**

- One article demonstrated a decrease in ICU LOS for patients with delirium detected by CAM-ICU
- Four articles demonstrated an increase in hospital LOS with patients positive for delirium utilizing the CAM-ICU tool.
- Two articles demonstrated increased mortality in the presence of delirium detected by CAM-ICU or non-CAM tools
- Three articles demonstrated an increase in hospital LOS for delirium positive patients using non-CAM ICU tool, while one article showed a decreased hospital LOS in patients using the CAM-ICU tool.
- Four articles demonstrated delirium detection in patients with the use of high-risk medications and restraints.

# Implications for Practice

It is the responsibility of the Nurse Practitioner to be aware of ICU delirium's effects and promote use of the CAM-ICU as the gold-standard.

- Early detection, may lessen effects of delirium
- Decreases hospital and ICU length of stay
- Decreases mortality

A multicenter, larger patient population research study is needed to gather evidence that CAM-ICU delirium detection and delirium-specific interventions impacts can decrease mortality and LOS.

Scan QR code for References



