

talk to ensure that all staff were confident in using the CAM ICU tool. Regular discussions and updates of the trial were presented at monthly clinical governance meetings and anonymized patient experiences were used to reflect on the trial's relevance to our patient group.

**RESULTS.** The benefits of collaborative working on Critical Care trials can be advantageous for the clinical team, research teams and more importantly the patient. As a result of collaborative working we recruited to target and also recruited the 1<sup>st</sup> and 1000<sup>th</sup> patient to the trial. Our uptake to the online training was above 95%. We noticed an improved compliance with CAM ICU scoring and also received positive feedback from the clinical team.

**CONCLUSIONS.** Critical Care is a complex field of medicine with clinical research in the Critical Care unit being challenging. Clinical research therefore should not be seen as a stand-alone activity. Embedding research into the culture of clinical practice, along with a collaborative working environment, can enrich patient outcomes ultimately providing new medical knowledge, therapies and technologies to optimise patient care.

#### REFERENCE(S)

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#### 0719

##### **Patients' experience regarding night time and sleep deprivation in ICU: results from a metasynthesis**

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**INTRODUCTION.** In Intensive Care Unit (ICU) patients are frequently subjected to sleep deprivation or to poor quality of sleep. Despite its relevance for short and late term outcomes, to our best knowledge no systematic review with regard patient experience on sleep in ICU have been published. Understanding their experience may help in developing interventions aimed at increasing both the quality and the quantity of sleep in ICU patients.

**OBJECTIVES.** The general intent of this study was to advance the knowledge available by exploring the patients' perspective of night time and sleep deprivation in ICU.

**METHODS.** A meta-synthesis was performed. Three phases were followed: (1) conceiving the synthesis, searching and retrieving literature, (2) appraising and classifying findings, and (3) synthesizing findings into a meta-summary and a meta-synthesis. CINAHL, MEDLINE (PubMed) and Scopus were consulted. The database research yielded 1,006 initial citations. Of those, 683 were for first excluded; 18 studies were duplicates. On the remaining 305 studies, only eight studies were selected on the basis of the title and the abstract. At the end, only seven studies met the inclusion criteria.

**RESULTS.** A total of 109 patients reporting their own experience. Data were collected by using interviews conducted in different times: in one study patients were interviewed in the ICU when possible, but generally all patients were interviewed after ICU discharge or immediately after hospital discharge in their homes within a variable. Three studies used a phenomenology approach, one a narrative approach, two hermeneutic approach and one a qualitative approach with semi-structured interviews. An abstraction process aiming at generating a conceptual diagram was performed. A total of 13 categories emerged categorized in five main themes: (1) *Environment* (nursing activities, acceptable sounds, frightful or disturbing sounds), (2) *Emotions and feelings* (fear/concerns, state of abandon, inexplicable insomnia), (3) *Perception of safety* (feeling to be safe/unsafe), (4) *Consequences of disease/ICU* (physical pain, time/space disorientation) and (5) *Patients' abilities* (inability to move, inability to talk). Finally, a meta-summary to calculate manifest frequency and intensity effect sizes was achieved.

**CONCLUSIONS.** Future qualitative research should focus on the experiences of ICUs' patients of night time and sleep deprivation for better representing this scenario. However, this metasynthesis can represent good suggestions for clinical practice because it is born from the original patients' perspectives in different cultural contexts.

#### REFERENCE(S)

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#### 0720

##### **Accuracy and precision of non-invasive thermometers in comparison to pulmonary artery temperature: a systematic review and meta-analysis**

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**INTRODUCTION.** Temperature management is an essential tool in critical care patients. The determination of the right temperature can provide the clinical team information to screen patients for infections or to identify and treat undesirable states of hiper or hypothermia. When available, invasive thermometers, such as pulmonary artery (PA) and vesical temperature, are reliable and can be use to monitor patients temperatures. However, many times invasive thermometers aren't being used and the medical and nurse staff must rely in non-invasive thermometers. In currently literature there isn't a consensus about accuracy and precision of methods such oral, axillary, tympanic membrane (TM), temporal artery (TA) and new methods like the Zero Heat Flux (ZHF) temperature.

**OBJECTIVE.** Therefore, this meta-analysis was conduct to identify the accuracy and precision of non-invasive thermometers in comparison to PA temperature.

**METHODS.** The review project was registered on PROSPERO (CRD42018089447). Studies were identified through a systematic search using PubMed, BVS/BIREME, EMBASE; CINAHL and WOS. Studies that compare any of the 5 non-invasive temperatures methods studied (oral, axillary, tympanic membrane, temporal artery temperature and Zero Heat Flux) with the pulmonary artery