

State of the Science in Hospice and Palliative Care

Concurrent Oral Session Abstracts

Effectiveness of an Algorithmic Approach to Ventilator Withdrawal at the End of Life (SAPLEN 101)

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Outcomes.

1. Describe the vulnerability of patients undergoing the withdrawal of invasive mechanical ventilation
2. Describe the effectiveness clinical trial

Importance. The transition to spontaneous breathing puts patients who are undergoing ventilator withdrawal at highest risk for respiratory distress. The approach to this care process is often reliant on local unit custom. A patient-centered algorithmic approach is needed.

Objective(s). Demonstrate that the algorithmic approach is effective to ensure greater patient respiratory comfort compared to usual care; determine whether algorithm-guided withdrawal will be associated with differences in opioid or benzodiazepine use compared to usual care.

Method(s). Patients are randomly assigned to algorithm and usual care groups via a stepped-wedge cluster randomized clinical trial design. Sites crossed over to the algorithm in random order after usual care data were obtained. Patient comfort was measured with the Respiratory Distress Observation Scale (RDOS) at baseline, at ventilator off, and every 15 minutes for an hour. Parenteral morphine and lorazepam equivalents from the onset of the process until patient death were used. The algorithm prescribes either ventilator weaning or one-step cessation based on patient distress and baseline consciousness; medication use is guided by RDOS scores.

Results. Usual care data $n = 120$, algorithm data $n = 48$. Gender and race (White or Black) were evenly distributed. All patients in the usual care arm underwent a one-step ventilator cessation; 58% of patients in the algorithm arm were weaned over an average of 18 ± 27 minutes. Patients had lower RDOS scores in the algorithm arm at the time the ventilator was turned off ($t = -2.8$, $p = .006$), at 15 minutes ($t = -2.34$, $p = .021$), and at 30 minutes ($t = -1.92$, $p = .057$). More opioids ($t = -2.30$, $p = .023$) and benzodiazepines ($t = -2.08$, $p = .040$) were given in the control arm.

Conclusion(s). The algorithm is effective in ensuring patient respiratory comfort. Of surprise, more medication was given in the usual care arm; however, less may

be needed when distress is objectively measured (RDOS), as in the algorithm.

Impact. Ventilator withdrawal is a common procedure for dying patients in the critical care setting.

A Randomized Controlled Trial of a Chaplain-Led Spiritual Care Intervention for the Surrogate Decision Makers of ICU Patients (SAPLEN 102)

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Outcomes.

1. Describe the expertise of chaplains on the palliative and ICU teams in caring for patients, families, and staff

2. Describe the effects of the Spiritual Care Assessment and Intervention on the psychosocial distress of family members of ICU patients

3. Evaluate the implications of the study for future research and clinical practice

Importance. Although ICU surrogates experience high distress due to the patient's life-threatening illness, most prior decision making interventions have been unsuccessful in improving surrogate well-being. Additionally, ICU admissions raise concerns about meaning, faith, and spiritual well-being for families that are rarely addressed.

Objective(s). To determine whether an intervention focused directly on the surrogate's spiritual and emotional well-being would improve the surrogate's outcomes.

Method(s). We conducted a single-blinded randomized controlled trial of a spiritual care intervention for ICU surrogates in 5 medical, cardiac, and neurological ICUs of one academic medical center. The Spiritual Care Assessment and Intervention involved 4+ proactive visits by a chaplain by phone or in person, assessment of 4 dimensions of spirituality (meaning/purpose, transcendence/peace, relationships, and self-worth), and individually tailored spiritual care interventions. The intervention was delivered by

racially and religiously diverse chaplains trained to address diverse patients, including nonreligious patients. The prespecified primary outcome was anxiety (Generalized Anxiety Disorders-7) assessed 6-8 weeks after discharge. Depression (PHQ-9), posttraumatic stress (IES-R), spiritual well-being (FACIT-sp), satisfaction (Patient Satisfaction Instrument—Chaplaincy), and positive religious coping (RCOPE) were secondary outcomes.

Results. We enrolled 192 patient/surrogate dyads, completed follow-up for 128 (66.7%). Patient mean age was 54.8 years (SD 18.2); patients were 45.7% female and 20.7% African American. Surrogates were most commonly the spouse (35.1%). Anxiety was significantly lower in the intervention group at follow-up (GAD-7 intervention group median score of 1 (range 0-5); control 4 (1-9), $p < .0001$), as were depression ($p = 0.0042$) and posttraumatic stress symptoms ($p = 0.0257$). Satisfaction with spiritual care improved ($p = .0005$) but not spiritual well-being ($p = 0.1226$) or positive religious coping ($p = 0.0857$).

Conclusion(s). The study demonstrates the importance of spiritual care in the well-being of ICU surrogates.

Impact. Results can inform palliative care teams about the value of spiritual care for ICU families and serve as evidence for greater inclusion of chaplains in palliative and intensive care.

Improving Continuity for Long-Stay Patients in the Pediatric ICU: A Randomized Controlled Trial (SAPLEN 103)

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Outcomes.

1. Identify the potential impact that attending continuity strategies for long-stay patients may have on patient and family caregiver Outcomes

2. Discern the potential impact of an attending continuity strategy on the clinical team caring for the patient on a week-to-week basis

Importance. The effects of a "primary attending" who follows a patient throughout an admission have not been tested in the chronically critically ill population in the pediatric intensive care unit (PICU).

Objectives. To evaluate PICU patient and family-level outcomes and attending acceptability of a continuity care intensivist (CCI).

Methods. Patient-parent dyads admitted 7 days in PICU were enrolled and randomly assigned to receive usual care (UC) or a CCI. The intervention consisted of volunteer PICU attendings who underwent communication skills training and standardized expectations for weekly parent and team contact. Parents completed surveys at enrollment and after PICU discharge about satisfaction with communication (PFS-ICU), and parental anxiety and depression. CCI and UC attendings were surveyed after the study about acceptability of the intervention. Intention to treat analysis with multivariate linear regression was used for primary length of stay outcome and secondary parent outcomes, controlling for parent age, race, and date of enrollment.

Results. 114 patient-parent dyads (58 CCI, 56 usual care) participated; average child was 5.8 years old, male (57%), White (50%), and with respiratory failure (96%); average parent was 36.7 years old, female (80%), White (59%). CCI intervention had no significant effect on PICU length of stay (average CCI 31.6 vs. UC 35.2; $P = 0.5$). CCI intervention also had no significant effects on assessment of physician communication ($P = 0.55$), satisfaction with decision making ($P = 0.25$), parental anxiety ($P = 0.79$), or depression ($P = 0.68$). 80% CCI providers and 70% other PICU attendings agreed that having a CCI led to more efficient decision making for patients.

Conclusion(s). CCI intervention did not significantly impact PICU length of stay or family outcomes but was perceived by attendings to have been useful to the team.

Impact. Further research should explore whether CCI intervention impacts the team's ability to care for patients.

End-of-Life Experiences Among "Kinless" Older Adults: The Case of Denmark (CO201A)

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Outcomes.

1. Outline risks faced by "kinless" older adults (those who lack a partner or a child) at the end of life

2. Outline the component of a "family-based model of care" and list examples of how this model may exacerbate inequality for women, unpartnered individuals, and the childless

Importance. Cross-nationally, end-of life (EoL) care systems are highly reliant on families to provide and facilitate support. Yet relying on and promoting family-