Use of Mindful Meditation in Critically Ill Children: A Pilot Feasibility Study

BACKGROUND
- Critically ill children, particularly those in respiratory failure, are at high risk of developing severe psychological distress and delirium.
- Mindful Meditation is a nonpharmacologic intervention known for stress reduction that may benefit pediatric patients in respiratory failure from critical illness.

METHODS
1. N = 50 patients undergoing 125 meditation events lasting 5-7 minutes each.
2. At the beginning, middle, and end of each meditation, we recorded the following vital signs: heart rate, respiratory rate, mean arterial pressure and cerebral NIRS (near infrared spectroscopy).
3. We surveyed patients, parents, and nurses on their perception of the mediation experience.
4. Funding provided by the Bucksbaum Foundation.

RESULTS
- A chronologic reduction of physiologic measures of stress was seen during meditation events:
  - Average HR decrease of 4.3% halfway & 7.2% at end.
  - Average RR decrease of 11% halfway & 19.4% at end.
- 87% of patients (n = 41) reported meditations made them feel less scared and 62% of patients (n = 29) reported feeling less pain during the meditation.
- RNs felt these exercises were useful to their patients 100% of the time.
- 100% of parents felt that the events neither interfered with medical care nor disturbed their child.
- No adverse events were reported.

CONCLUSIONS
- Mindful meditation is feasible, well-tolerated, and safe for critically ill pediatric patients with respiratory failure.
- This intervention could potentially decrease not only psychologic but also physiologic distress.

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