Connection ICU: A Novel Mobile Application to Prevent Delirium in the Intensive Care Unit

Steger, Ava (School: Rocky Mountain High School)

Patients with delirium suffer severe confusion, paranoia, hallucinations, and struggle to understand or pay attention to what is happening. The COVID-19 pandemic has worsened the already severe problem of delirium in Intensive Care Units (ICU). Family involvement in patient care is seen as a vital tool to manage delirium in ICUs. To facilitate family involvement in ICU patient care, a mobile application, Connection-ICU, was created. Connection-ICU comprises four sections: an educational information page for family members, an aide for providing reorientation messages, an ICU diary, and an area for photos and video messages. These sections were constructed based on research concerning the most effective ways to utilize family members in delirium care. The present study sought to assess whether it would be easy to use by the general population. Snowball sampling was used to recruit 133 participants to complete a usability survey after they interacted with the app. Supporting hypotheses, participants' ratings showed strong support for the app; 87.3% of participants agreed or strongly agreed that the app would be usable and help them increase involvement in care. Agreement was strong regardless of previous experience having a loved one in the ICU or with delirium. These results indicate that Connection ICU has potential to provide a feasible means for families to support loved ones during ICU delirium. While results are promising, more development of the app and further testing of both user opinions and implementation into real ICU delirium care is needed.

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