

OUT-OF-BODY EXPERIENCES: DISTINGUISHING CONNECTED CONSCIOUSNESS FROM DISCONNECTED CONSCIOUSNESS IN COMATOSE INTENSIVE CARE SURVIVORS

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Grant 390/24

Background: Unusual subjective experiences such as out of body experiences (OBEs) and near-death experiences (NDEs) are increasingly reported by critically ill patients, yet the accuracy of these memories and their potential grounding in real world events remain unknown.

Aims: This two year prospective project investigates (i) the incidence of episodes of disconnected consciousness (i.e., OBEs and NDEs) in prolonged intensive care unit (ICU) stays with coma (whether pharmacological or otherwise), (ii) the accuracy of memories potentially linked to real life events (episode of connected consciousness), (iii) medical and cognitive factors influencing these experiences, and (iv) their psychological impact up to six months after discharge.

Methods: To objectively test for potential connected consciousness, each ICU room contains two unexpected target stimuli: a sunflower sticker placed within the patient's visual field and a duck sticker concealed on a high shelf, accessible only if an OBE with elevated viewpoint were genuine. Upon awakening, survivors undergo a detailed semi structured interview including standardized measures to assess NDEs and OBEs, OBE specific probing, explicit and implicit memory tasks with distractors, and confidence judgments (Remember/Know/Guess). Medical data are systematically collected, and psychological outcomes are assessed at six months with the HADS and IES R scales.

Preliminary Results: Since March 2025, 33 patients have been enrolled (mean age 58 ± 16 y; 52% female; mean ICU stay 18 ± 13 d). Primary organ dysfunctions included cardiovascular ($n=6$), respiratory ($n=10$), digestive ($n=5$), neurologic ($n=10$), and other ($n=2$) etiologies. Twenty-one patients (64%) reported disconnected consciousness experiences; three (9%) met the NDE C cut off, and four (12%) reported an OBE. No patient recalled events suggestive of connected consciousness during coma, and none identified the hidden duck. At six month follow up, only one patient reported symptoms of anxiety and depression, and no cases of PTSD were detected. Finally, early observations of the few NDE memories collected so far suggest measurable content related changes within six months of the acute episode, indicating that these memories may evolve over time and reinforcing the value of prospective longitudinal assessment. Therefore, these preliminary findings represent the first prospective, systematic investigation of real-life memory accuracy during critical illness and will enable robust testing of factors underlying OBEs and NDEs, and the evolution of these experiences.

Keywords: Disconnected consciousness, Near-death experiences, Out-of-body experiences, Memory

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