

Examining the cross-sample validity of the Intensive Care Questionnaire (ICEQ) between two independent critical care settings

Researchers

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Background

This study is part of a developing research theme assessing both short and long-term outcome from intensive care and to establish the associated factors. Many patients have little or no recall of factual events of the intensive care experience (Hall-Smith et al. 1997; Russell 1999; Jones et al. 2000). The memories described are often of unpleasant events and patients describe delusions, 'dreams and hallucinations' that are frightening and persecutory in nature (Russell, 1999; Jones, 2000; Green, 1996). Narrative accounts of the experience and the content, duration and type of dreams and hallucinations (Greer, 1979; Granberg, 1999; Green, 1996; Russell, 1999) are often described some months after the experience, although it has been demonstrated that patients may recall important aspects of this. Studies suggest that this experience may subsequently affect both short and long term psychological outcome from intensive care, e.g. (Sawdon et al. 1995; Dyer 1995b; Turnock 1997). These studies have used a variety of non-standardised assessments of patients' experiences of intensive care, and little systematic exploration such an experience has been undertaken. For research in this area to advance and for the results to have applicability in another setting a systematic standardised assessment of the intensive care experience is necessary.

Aims of study

1 To explore the relationship between the intensive care experience and anxiety, depression, and post-traumatic stress at time of hospital discharge, and at two and six months.

2 To examine the cross-sample reliability and construct/predictive validity of the ICEQ in a second independent critical care service (Mid Trent Critical Care Network)

Methods of working

As part of a recent study funded by the Chief Scientist's Office (Title: Quality of Life after Intensive Care: Assessment and Prediction (K/OPR/2/2/D330) patient's perceptions of the intensive care experience have been explored at the point of hospital discharge in the North-East of Scotland. Based on preliminary evidence from patients and staff, a 31 item Intensive Care Experience Questionnaire (ICEQ) was developed and piloted. This was administered to 109 patients. A principal components analysis (N=109) led to the retention of 24 items, and suggested the existence of 4 domains, i.e. 'awareness' (9 items), 'fears' (6 items), 'memories' (5 items), and

'satisfaction with care' (4 items). Initial psychometric evaluation of the ICEQ has shown the initial reliability of each domain (Cronbach's > 0.70 for each domain) and provided initial evidence of the construct and concurrent validity of the measure.

Prospective analysis in this setting following 80 patients some 6 and 12 months after discharge has revealed that levels of anxiety and depression remain high in this patient group. This mirrors similar findings from Scragg et al., (2001). In addition, IES scores appear to remain high up to 6 and 12 months after discharge in some patients.

This current study will evaluate whether the questionnaire developed with patients from one centre (Dundee) performs equally successfully with patients from other centres. We need to explore the reliability, construct and predictive validity of the 4 domain structure of the ICEQ with a new cohort of ICU patients in a different and independent setting. If the intensive care experience is predictive of future patient adjustment, and this can be confirmed in an independent setting with a new cohort of patients, this is likely to have important implications for the delivery of critical care services.

It is important to establish that the measure performs satisfactorily in a second setting before allowing more generalization (research questions 1 & 2). Therefore the ICU teams from the Mid Trent Critical Care Network (see appendix 1 for units within Mid Trent Network) are collaborating with Dundee on this project.

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