Scottish Government Health Directorates Chief Scientist Office



FOCUS ON RESEARCH

DEVELOPMENT OF A COMPREHENSIVE, PATIENT-CENTRED STRATEGY TO PROMOTE NUTRITIONAL RECOVERY FOLLOWING CRITICAL ILLNESS.

Researchers

<u>Fellow:</u> Judith Merriweather. <u>Supervisors</u>: Prof P Smith, Prof TS Walsh, Dr L Salisbury.

Aim

To provide a comprehensive understanding of the factors influencing nutritional recovery, and the relationship between them, in post intensive care patients; and to develop a model of care that will improve current management of nutrition for patients recovering from critical illness.

Project Outline/Methodology

A mixed method study explored patients' experiences of eating and the factors that influenced nutritional recovery in patients after critical illness. 17 patients were recruited on discharge from intensive care and a baseline assessment of nutritional status (well nourished or malnourished) was carried Nutritional intake and subjective measures of appetite, fatigue, breathlessness and pain were measured at baseline and weekly during ward stay. Weekly interviews explored patients experiences of eating on the ward and observations of ward practice, focussing on mealtimes, were carried out three times a week for the duration of the patients ward stay. 14 patients were followed up at 3 months post intensive care discharge. Nutritional status, intake and subjective measures of appetite, fatique, breathlessness and pain were reassessed and a final interview was carried out.

Key Results

Patients' nutritional status did not change over the three month period and they remained either well nourished or malnourished .All patients failed to achieve their calorie and protein requirements during their ward stay and although intakes had improved by three months post intensive care discharge, these still fell short of calculated targets. The subjective measures demonstrated that all patients experienced physiological issues including poor appetite, breathlessness, fatigue and pain on discharge from intensive care with variable improvement of these Multiple factors were identified that over time. contributed to patients' failure to achieve nutritional goals. Analysis of sequential interviews and observations revealed a number of themes including nutritional care delivery failures such as the inflexibility of hospital meals, failure to deliver nutritional supplements and lack of staff knowledge about critical illness related issues. Patient related factors that emerged included physiological and psychosocial issues such as poor appetite, early satiety, taste changes, low mood and depression Patients also experienced social isolation and struggled with lack of familiar food and routine. The identified factors that influence nutritional recovery interlink serving to increase the complexity of nutritional problems for this patient group.

Conclusions

Existing processes to provide nutritional rehabilitation to post intensive care patients are not effective and patients fail to meet their nutritional targets. The data from this study suggest that improvement could be achieved by implementing an individualised model of care to address the identified organisational and patient related factors that influence the nutritional recovery of patients after critical illness.

What does this study add to the field?

This study highlights the range and complexity of factors that influence nutritional recovery. New models of providing nutritional rehabilitation that achieve greater focus on individual patients and the seguelae of critical illness are required.

Implications for Practice or Policy

This study suggests that nutritional recovery after critical illness is suboptimal. There is a need to improve ward-based nutritional care for post intensive care patients.

Where to next?

A future study will look at implementing a new model of care to promote nutritional recovery in this patient group.

Further details from:

Judith Merriweather Chancellor's Building 49 Little France Crescent Edinburgh, EH16 4SB

Email: judith.merriweather@sms.ed.ac.uk