Do the elderly patients eat well? A quality improvement program in Acute Care of Elderly Unit (ACE) of Prince of Wales Hospital

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Introduction
Malnutrition is common in elderly people, 12% in Chinese hospitalized patients had low body weight, 40% anaemic are reported in Asian studies. Increased or altered metabolic demands and mal-absorption due to illness, inadequate intake due to chewing or swallowing problems contribute reasons of malnutrition; depletion is more rapid with limited stores during hospitalization. Those give consequences of decrease wound healing ability, diminished functional ability, longer hospital stays, higher morbidity and mortality in elderly patients. However it is under-recognized in hospital setting, sometimes body weight and body height are not properly recorded. A quality improvement program cooperated with dietetics and catering professionals has implemented since Aug 2012 to promote prevention and better management of malnutrition in hospitalized patients.

Objectives
By use of selected screening tool and agreed protocol for nutrition care, early identify patient with risk of malnutrition and then implement preventive intervention to enhance intake for oral feeding patient, improve nutritional status and quality of life.

Methodology
1. Patients with age 70 or above are screened for risk of malnutrition by use of Malnutrition Screening tool (MST) within 48 hour of hospital admission and are triaged for protocol defined care plan. It includes: a. Ensure body weight (BW), body height (BH) and Body Mass Index (BMI) measure and monitoring by developing tool and conversion table to facilitate measurement e.g. BH prediction by knee height. b. Ensure consistent monitoring on oral feeding for inpatients by standardizing oral intake charting as portion of hospital diet each meal patients consumed.
tables are available for fluid content and portion size of different hospital diets. 2. Implement visual alert system, the “Alert Meal Tray” since Aug 2013 to alert ward staff including supporting workers on patients at risk and provide timely feeding assistance.

**Result**

Three one duty shift snapshot audits had been carried out in Aug 2013, March 2014 and Feb 2015. It found that in average 20 patients age 70 or above (40-50% total daily inpatient) are screened by MST and staff compliance on performing MST was satisfactory from 90% to 100%. In average 1-2 cases from screened patients was found medium or high risk, and 2 more cases are found underweighted by BMI checking. Besides it was found more than half of elderly inpatients with different reasons of anaemic (Hb 10-12g/dl) and below albumin blood level (20-34g/l), which were common for patients with community acquired pressure sores. Therefore “Alert Meal Tray” was offered for high risk, underweight patients or patients with pressure sores, total 256 patients were supported up to 29/12/2014. The quality improvement program has greatly aroused staff awareness on nutritional care for elderly inpatients. However the improvement on nutritional status of inpatients was not well reflected due to short length of stay in acute hospital setting (average length of stay 5 days). A good handover on patient nutritional status and continuous support and monitoring for sequent care in extend care setting or community is crucial.