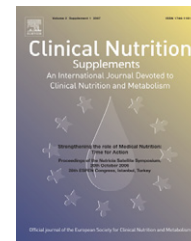




Available at www.sciencedirect.com



<http://intl.elsevierhealth.com/journals/clnu>



ORIGINAL ARTICLE

A review of reviews: A new look at the evidence for oral nutritional supplements in clinical practice

Rebecca J. Stratton^{a,b,*}, Marinos Elia^a

^a*Institute of Human Nutrition, School of Medicine, University of Southampton, UK*

^b*Medical Affairs Department, Nutricia Clinical Care, UK*

KEYWORDS

Systematic review;
Meta-analysis;
Randomised
controlled trial;
Malnutrition;
Oral nutritional
supplements;
Enteral feeding

Summary

Decisions about the treatment of disease-related malnutrition should be guided where possible by evidence. Increasing numbers of systematic reviews and meta-analyses have reviewed the efficacy of oral nutritional supplements for treating disease-related malnutrition.

In order to consolidate this evidence, an overview of systematic reviews and meta-analyses ('review of reviews') in which oral nutritional supplements were compared with routine care was undertaken, focussing primarily on clinical outcomes. Thirteen systematic reviews and meta-analyses were reviewed (up to August 2006), either of trials in adults, including the elderly, with a variety of conditions (6 reviews), or in specific groups, including chronic renal disease, diabetes, cancer, chronic obstructive pulmonary disease (COPD), hip fracture and gastrointestinal surgery (7 reviews).

This review of reviews found largely consistent clinical benefits with oral nutritional supplements in meta-analyses of trials across patient groups. Benefits included significant reductions in mortality and complications (e.g. infections, pressure ulcers), particularly in acute settings and acutely ill geriatrics. In some specific groups there were reductions in complications (in gastrointestinal surgery, hip fracture) but in other groups (e.g. COPD, chronic renal disease) more research is needed to assess relevant clinical outcomes. Across reviews of all patient groups, oral nutritional supplements consistently improved total nutritional intake, with little suppression of food intake. In general, reviews indicated improvements in weight (weight gain or less weight loss) with oral nutritional supplements. The only systematic review comparing oral nutritional supplements with dietary advice showed greater intakes and weight gain with oral nutritional supplements.

In summary, there is increasing evidence to support the use of oral nutritional supplements in clinical practice, particularly in acutely ill and older patients. Future research must be

*Corresponding author. Institute of Human Nutrition, School of Medicine, University of Southampton, F Level, MP 113, Southampton General Hospital, Southampton, UK. Tel.: +44 2380 796317; fax: +44 2380 794945.

E-mail address: r.j.stratton@oton.ac.uk (R.J. Stratton).

well designed in order to ascertain the most effective ways of using oral nutritional supplements and other dietary strategies to optimally treat disease-related malnutrition. © 2007 Elsevier Ltd and European Society for Clinical Nutrition and Metabolism. All rights reserved.

Introduction

In the current healthcare environment, there is pressure to promptly identify conditions and to treat them in an ethical and clinically effective way using limited resources. This applies to the treatment of disease-related malnutrition, a condition that is widespread in hospitals, community health care settings (outpatients, care homes, general practice) and in free living older people.¹⁻⁴ Figure 1 highlights the widespread prevalence of disease-related malnutrition (identified with the Malnutrition Universal Screening Tool 'MUST', www.bapen.org.uk) across healthcare settings and in free living elderly people.^{1,2}

Disease-related malnutrition is detrimental physiologically and clinically, impairing quality of life and delaying recovery from illness. Recent data suggests disease-related malnutrition doubles the risk of mortality in hospital patients and triples mortality in elderly patients in hospital and after discharge.^{5,6} Disease-related malnutrition increases use of healthcare resources (hospitalisations, GP visits)^{1,3-5,7,8} and latest estimates suggest that this condition costs the UK more than £7.3 billion (~10.9 billion euro) annually.^{3,9}

Considering the widespread prevalence and adverse consequences of malnutrition, a condition that is largely treatable, prompt identification is required with screening, followed by the most appropriate, effective and ethical treatment. Most patients who have (or are at risk of)

malnutrition can be managed with a variety of oral dietary approaches including dietary modification (fortification, extra snacks, etc.), counselling by a dietitian and/or commercially available oral nutritional supplements. With the rise of evidence-based practice, there is a need to demonstrate the effectiveness of these different treatment strategies. A systematic review (type I in the hierarchy of evidence¹⁰), which may or may not include a meta-analysis, is considered the best way of assessing the evidence base for interventions particularly when undertaken by those with a good understanding of the clinical use of the treatment.

An increasing number of systematic reviews have been undertaken to review the effectiveness of oral nutrition support strategies in the management of malnutrition. The majority of these systematic reviews have focussed on trials of oral nutritional supplements (ONS), the strategy for which there is the greatest number of individual trials available.⁴ Such reviews are often used as a basis for the production of guidelines by national and international professional bodies, such as the National Institute for Health and Clinical Excellence (NICE) in the UK.¹¹ Indeed, there are already a substantial number of guidelines and standards referring to the use of ONS, and examples from the British Association for Parenteral and Enteral Nutrition (BAPEN) and the European Society for Clinical Nutrition and Metabolism (ESPEN) are summarised in Table 1.

Different systematic reviews and meta-analyses can, however, sometimes produce conflicting and confusing

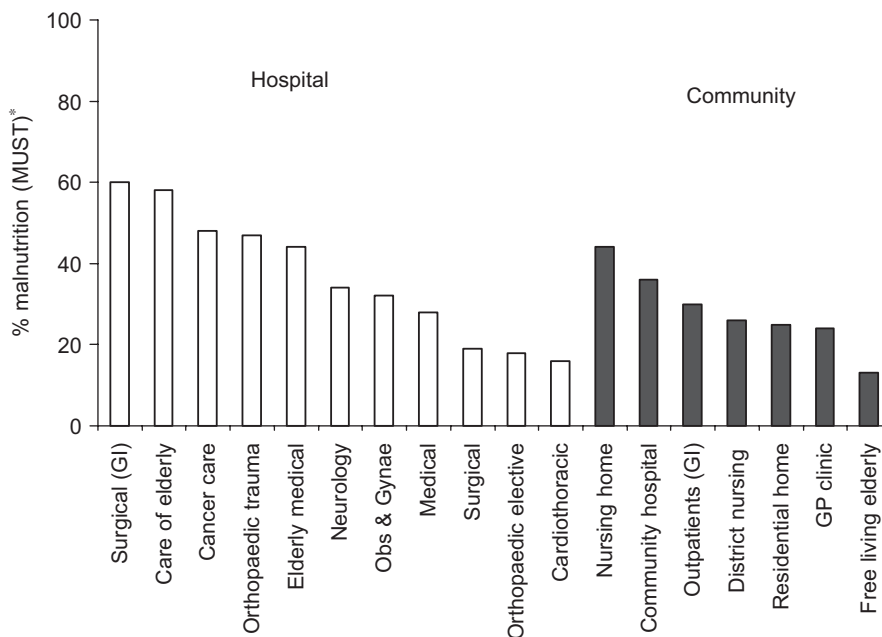


Figure 1 Prevalence of disease-related malnutrition (using 'MUST') in patients in hospital and community settings in the UK.^{1,2}
*Malnutrition = medium and high risk using 'MUST'.

Download English Version:

<https://daneshyari.com/en/article/2686125>

Download Persian Version:

<https://daneshyari.com/article/2686125>

[Daneshyari.com](https://daneshyari.com)