Developing and testing the feasibility of a mealtime intervention on both resident health and well-being, and care home practices

1. Background to the study

According to the Office for National Statistics (2014), almost 300,000 older people lived in a care home in 2011, 60 percent of whom were aged 85 or over (indicative of a trend towards an ageing care home population). Malnutrition (undernutrition) is one of the greatest threats to the health, wellbeing and autonomy of older people, particularly those living in care homes. It is thought that over half the people admitted to hospital from care homes are malnourished (*cited by* Age UK, 2015). Undernutrition is a critical issue because it is associated with a poorer quality of life, increased morbidity and ultimately a greater risk of mortality. In addition, these problems can be exacerbated by hospital admission, as hospitals struggle to provide appetising food and adequate feeding assistance to patients (BAPEN, 2009).

Undernutrition may be caused by a number of underlying medical conditions such as dysphagia, digestive disorders which disrupt the uptake of nutrients and numerous conditions which adversely affect appetite (e.g. cancer, liver disease, or persistent pain and/or nausea). However, there are also numerous physical factors (e.g. disability, poor dentition), psychosocial factors (e.g. anxiety, depression) and food choice, quality and access issues which may adversely affect food intake and consequently increase the risk of undernutrition. Whilst the need to improve the nutritional status of older people living in care has long been recognised, how this can best be achieved and whether (and which) interventions are effective at reducing morbidity and improving wellbeing is less clear.

This research seeks to address this knowledge gap, building on the recognition that mealtimes have a critical socio-cultural role in the care of older people, both in terms of ensuring adequate nutrition and promoting broader health and wellbeing. Indeed, 'enjoying food and being able to eat food' are central to the UK Government's nutrition action plan; at the same time it is acknowledged that there are physical, cognitive, behavioural and cultural barriers (including those of staff) that impact on this (Dunn and Moore, 2014). Furthermore, work by the British Geriatrics Society (2011) highlights the importance of involving residents in decisions about their care, including aspects of care relating to mealtimes. The principles of stakeholder involvement and shared decision-making will be integral part of this research project.

This project has been informed by two recently published systematic reviews by PenCLAHRC (Abbot et al., 2013, and Whear et al., 2014), which suggest that simple changes to the mealtime environment (e.g. the style of food service, seating arrangements and the playing of music) can positively influence nutritional outcomes and the behavioural and psychological symptoms of dementia (BPSD). However, the quality of mealtime intervention studies to date has been generally poor due to small sample sizes, lack of randomisation, and inadequate control for confounding factors (including those pertaining to residents, staff and the individual care homes). Furthermore, these interventions are not defined in detail, limiting our understanding of how they work and how they can be replicated in a diverse range of residential care settings. As a result, this project aims to consider the complex interplay of social and environmental factors like the meal experience, meal quality and meal access for residents, the role of staff and individual care home policies.

2. Hypothesis, aims and objectives

The aim of this study is to develop and test the feasibility of a mealtime intervention on both resident health and wellbeing, and care home practices.

Objectives will be to:

(i) Identify the barriers and facilitators to providing optimal mealtime experiences in a care home setting (by conducting a systematic review);
(ii) Develop a mealtime intervention in conjunction with key stakeholders (using an intervention mapping process);
(iii) Assess the potential impact and feasibility of the mealtime intervention (by conducting a mixed methods before and after study).

3. Research Methods

(i) A systematic review of qualitative studies will be conducted to identify the barriers and facilitators to providing an optimal mealtime experience. Study selection criteria will be identified and used to develop a search strategy. A search of relevant databases and other sources of evidence will be conducted. Initial screening of titles/abstracts will be undertaken, potential studies for inclusion identified, and full text papers sought. Screening of full text papers will follow to identify the studies to be included. A data extraction form will be piloted and used to extract relevant data. Data will be coded and thematic analysis will be used to identify shared barriers and facilitators across the studies.

(ii) Intervention development. Using data from the reviews as a guide, and adopting an Intervention Mapping (IM) process, focus groups with key stakeholders (care home residents, families and staff) will be used to identify key components of an intervention and important issues for developing and undertaking an evaluation. These data will be used to develop a preliminary intervention manual, including any staff training. Adopting an IM approach to the intervention design will help to ensure a good match between content of the evolving intervention, needs of the target population and the implementation setting. ENRICH http://www.enrich.nihr.ac.uk/ will be a key source of support, and their Toolkit for Care Home Research and the Research Ready Care Home Network will be used to identify potential care homes to work with. The 'My Home Life' project http://myhomelife.org.uk/ will be a further source.

(iii) A mixed methods before and after study will be undertaken with two care homes to assess the feasibility and acceptability of the intervention. This will include interviews with residents, families and staff to explore their experiences of the intervention. A purposive sampling strategy using maximum variation will be used. Ethnographic observations during mealtimes will also be undertaken. Data from the observations and interviews will be analysed using framework analysis, an approach suitable when analysis involves triangulation of data from different sources. Quantitative data, such as resident wellbeing, quality of life and care home practices will also be collected. Together the data will be used to refine the intervention manual in readiness for further testing of the intervention using appropriate methods.

4. Relevance and significance

Some of the benefits of the proposed research include:

- Increasing capacity in care home research, an often neglected area due to the real and perceived challenges of working with (a) the resident population, who are often physically and cognitively frail, and (b) the care home sector which can involve private businesses, low paid and low valued care professionals with a high employee turnover;
- The potential for simple interventions to have benefits for residents which in turn could have benefits for the home and the quality of resident-centred care they provide;
- High quality publications resulting from the PhD.

References

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