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Supporting nutrition in frail older people:

a qualitative study exploring views of primary care and community health professionals

Abstract

Background
Malnutrition is associated with increased morbidity and mortality, and is very common in frail older people. However, little is known about how weight loss in frail older people can be managed in primary care.

Aims
To explore the views and practices of primary care and community professionals on the management of malnutrition in frail older people; identify components of potential primary care-based interventions for this group; and identify training and support required to deliver such interventions.

Design and setting
Qualitative study in primary care and community settings.

Method
Seven focus groups and an additional interview were conducted with general practice teams, frailty multidisciplinary teams (MDTs), and community dietitians in London and Hertfordshire, UK (n = 60 participants). Data were analysed using thematic analysis.

Results
Primary care and community health professionals perceived malnutrition as a multifaceted problem. There was an agreement that there is a gap in care provided for malnutrition in the community. However, there were conflicting views regarding professional accountability. Challenges commonly reported by primary care professionals included overwhelming workload and lack of training in nutrition. Community MDT professionals and dietitians thought that an intervention to tackle malnutrition would be best placed in primary care and suggested opportunistic screening interventions. Education was an essential part of any intervention, complemented by social, emotional, and/or practical support for frailer or socially isolated older people.

Conclusions
Future interventions should include a multifaceted approach. Education tailored to the needs of older people, carers, and healthcare professionals is a necessary component of any intervention.

Keywords
community; frailty; health education; malnutrition; older people; primary care.

INTRODUCTION

Malnutrition in the form of undernutrition is estimated to affect 1.3 million people aged >65 years living in the community in the UK.[1] Malnourished people see their GP twice as often, have three times the number of hospital admissions, and stay in hospital 3 days longer than those who are well nourished.[2] Older people who are malnourished are at increased risk of complications such as infections,[3] pressure sores,[4] falls,[5] and impaired physical performance.[6]

Data from prospective studies have shown that older people who are classified as overweight based on the body mass index (BMI) range for the general adult population live longer than those who are underweight. A U- or J-shaped curve of the association between BMI and mortality has been observed in several studies.[7–11] According to National Institute for Health and Care Excellence (NICE) guidelines, nutrition support should be considered in people who are malnourished, as defined by one of the following: a BMI <18.5, unintentional weight loss >10% in the last 3–6 months, or a BMI <20 and unintentional weight loss >5% within the last 3–6 months.[12]

With age, the accumulation of health conditions can result in frailty, which is estimated to affect approximately 11% of people aged ≥65 years.[13] Frailty is a state of vulnerability due to loss of resilience after a stressor event, which increases the risk of adverse outcomes,[14] including falls,[15] delirium,[16] disability,[17] and mortality.[18] Although there is a significant overlap between malnutrition and frailty,[19] these conditions are not interchangeable.[20] In a systematic review, a pooled analysis of data from 5447 community-dwelling older people revealed that 68% of the malnourished older people were physically frail, whereas 8.4% of the frail older people were malnourished.[21] It has been suggested that considering malnutrition and frailty together may lead to improved and complementary interventions.[19]

The current 2017–2018 GP contract states that all general practices must identify people aged ≥65 years who are living with moderate or severe frailty.[22] Although medication review and falls risk assessment are explicitly referred to as required interventions, there is no specific guidance regarding assessment for malnutrition in frail older people, except for people with dementia.[23]

Data from the authors' previous research exploring the views of older people at risk of malnutrition and their informal carers show that most people are receptive to receiving dietary advice, provided it is delivered by a trustworthy source and recommended by a clinician.[24] However, little is known

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How this fits in

Malnutrition is common in community-dwelling older people and it is associated with frailty. Despite prompt management of self-reported weight loss by primary care professionals to rule out underlying sinister conditions, once these have been excluded, unintentional weight loss is commonly not addressed further as a condition in its own right requiring treatment. Lack of training in nutrition and time constraints are common barriers to management in primary care. Future interventions could include case finding during frailty assessments with provision of dietary advice using a tiered approach based on the needs of the individual. Education for older people, carers, and healthcare professionals is an essential part of any intervention.

about the views of community health professionals around the management of malnutrition in later life. The majority of studies looking at healthcare professionals' attitudes towards nutrition in frail older adults are focused on screening and detection in a hospital setting. Doctors and nurses lack nutritional knowledge,[25] and doctors appear in comparison to perceive malnutrition as less important than nurses and dietitians do.[26]

The objective of this study was to explore primary care and other community health professionals' views on how to support nutrition in frail older people, in order to inform future community-based interventions for this population.

METHOD

The aim of this study was to:

- explore the views and practices of primary care and community professionals on the management of malnutrition in frail older people;
- identify components of potential primary care-based interventions for this group; and
- identify training and support required to deliver such interventions.

Design and setting

A qualitative study with focus groups and an additional semi-structured interview was undertaken. General practices, community multidisciplinary teams (MDTs), and dietitians from London (Camden, Islington, Redbridge, Sutton) and North and East Hertfordshire were purposively selected across urban and suburban areas, and different clinical commissioning groups (CCGs).

Participant recruitment

The following groups of community professionals working with older people were invited to take part:

- general practices: at each practice, all GPs, practice nurses, and healthcare assistants;
- health professionals from frailty MDTs; and
- dietitians working with community-dwelling older people.

Data collection

Topic guides were developed with input from an advisory group including lay members, and were piloted and developed iteratively during the study (see Supplementary Document S1). Focus groups were scheduled around the time that the professionals' group usually convened and were co-facilitated by two researchers. One-to-one interviews were offered for those who were unable to attend or preferred to share their views outside of a group setting (using the same topic guide as for the focus groups). Data collection was concluded when no new themes emerged from the interviews. Focus groups and interviews were audio-recorded with consent, transcribed verbatim, and anonymised.

Data analysis

Each transcript was read by at least three members of the research team. A coding framework was developed, agreed on, and applied to all transcripts. NVivo software was used to facilitate data management. Thematic analysis was used to identify key emergent themes and their meaning.[27] The analysis took an inductive approach, with themes directly linked to the data. The multidisciplinary analysis team (all of the authors) independently read a sample of different transcripts from across focus groups and inductively identified a preliminary thematic framework. A selection of transcripts were coded using this thematic framework by one author, further refined by the team, and then applied to all transcripts including focus groups and individual interviews. The overall interpretation of meaning and implications were considered by the entire research team, who brought expertise in primary care, nutrition, ageing, and qualitative research, and included lay members.

RESULTS

In total, seven focus groups were conducted (GP practices $n = 4$; frailty community MDT

n = 1; dietitians *n* = 2). Practice nurses were under-represented, hence those of them who could not attend the focus groups were invited to an individual interview. As a result, an additional interview was arranged with a practice nurse. Overall, 60 health professionals took part in the study (further information available from the authors on request).

Four themes were identified, as follows: understanding and identifying malnutrition; management of unintentional weight loss in the community; challenges to addressing malnutrition; and potential solutions. Quotes from participants illustrating each theme are shown below.

Understanding and identifying malnutrition

Health professionals of different backgrounds shared a common understanding of the complex multifactorial aetiology of malnutrition in frail older people. Cognitive impairment was reported as a key predisposing factor, affecting the older person's memory and executive skills, including ability to prepare a meal. Social isolation and living alone were also thought to affect access to food. Depression and loneliness were perceived as impacting greatly on motivation to eat:

'It can often be that the elderly are isolated, especially the really frail ones … they haven't yet got a care package or whatever, it's often mood related as well.' (Focus group [FG] 5, MDT nurse)

Identification of malnutrition was triggered variably across different settings. Many GPs acknowledged it was difficult to identify malnutrition at first encounter, unless it was clinically evident. Signs of self-neglect, cognitive problems, recurrent falls, or self-reported exhaustion were risk factors that aroused suspicion. GPs thought the opportunity to assess a patient in their own environment when making a home visit was more likely to alert them to malnutrition risk:

'First of all, in a large surgery like this people can see different doctors, and given the time pressures and the time commitments, and also the clothes that people wear, any potential evidence of malnutrition may not be overtly evident.' (FG4, GP)

The Malnutrition Universal Screening Tool (MUST) was reported to be used on an occasional basis in the community MDTs, but less so in primary care:

'So if there's been any weight loss or their appetite is poor, I can see visibly that they're underweight, I will do a MUST [Malnutrition Universal Screening Tool] *score and normally refer on to dietitians; I might provide some basic advice but I'm no expert.'* (FG5, MDT nurse)

Management of unintentional weight loss in the community

A predominant finding in primary care teams was the approach to weight loss as a symptom of potential underlying sinister pathology, rather than a condition in its own right requiring further treatment. Self-reported or documented unintentional weight loss typically generated a prompt reaction by GPs, leading to a series of investigations, but with little or no further action taken once malignant conditions had been ruled out:

'From our respect, very often it's a disease focus; if people say, "I've lost weight" we're thinking alarm symptom, could this be some life-limiting disease, do we need to think about a 2-week referral, rather than thinking about it in a more sort of generic nutritional way.' (FG4, GP)

'… and then once you're sort of satisfied that it's not that [life-limiting disease], *probably we don't react as proactively as we could do for the wellbeing side of it.'* (FG6, GP)

Once professionals identified someone as malnourished, they would commonly refer them to a dietitian or to meals provision services. From GPs' and MDT professionals' views, there was a sense of confidence that obviously visible malnutrition was easier to recognise, but timely identification for those at lower risk was thought to need improvement:

'I think we're good at screening all our patients for malnutrition, and definitely picking up those who are in the more obvious malnourished category and making onwards referrals, but maybe there are some lower-risk patients that we're not going into as much detail as they could benefit from on our assessments.' (FG5, MDT nurse)

There was little mention of dietary education delivered directly by GPs or MDT members; however, dietitians delivered education to the individual or their carer in the form of 'Food First'[28] advice on food enrichment. They discussed differences in practices among dietitians, especially

regarding prescription of oral nutrition supplements (ONS):

'... an awful lot of dietitians just fall straight back on nutritional supplements; they don't actually use the thing that sets us apart from every other health professional, which is our knowledge of food.' (FG1, prescribing support dietitian)

Concerns over financial implications were reported regarding the high cost of supplements in the community. ONS prescriptions are commonly initiated in hospital without provision for review. This practice risks unnecessary ongoing use and expense, which was echoed within primary care teams:

'It costs [name of county] *about £5 million in nutritional supplements and there's a big drive to try and cut that down because a lot of it is unnecessary ... And it's prescribed due to either patient request, or a doctor or nurse or dietitian's lack of knowledge or experience, because it's an easy thing to do.'* (FG3, primary care team)

Challenges to addressing the problem of malnutrition

The majority of health professionals experienced challenges addressing malnutrition in frail older people, although they saw the problem from different angles. A prominent barrier to addressing malnutrition in older people was the lack of training in nutrition for primary care practitioners (from medical school training through to specialty curriculums):

'No, there's no formal training. I think we pick it up as we have done over the years with healthy eating advice, healthy eating stuff we get sent and given, it usually forms part of other sort of learning and teaching, but, no, I don't think we've ever formally had any nutrition training.' (FG3, GP)

'I have to be honest, once you've done that [investigations to rule out underlying causes] *and I'm then kind of stuck, I don't know what to do next, because I don't really know much about what to do. So I've had one patient where he's had weight loss but I've just referred him to a dietitian now because I don't really know what else I can do for him, because I'm lacking in knowledge.'* (FG6, GP)

Dietitians were concerned about misconceptions around restrictive diets (dominated by cardiovascular disease and diabetes prevention), which can be inappropriately passed on to older people either by the primary care team or via public health messages:

'There's a lot of misinformation given by GPs [and] *consultants, and patients will hold onto diabetes specialists' every word. It's not evidence based and, time and time again, we have to unpack a lot of clinical issues with patients. And tell them the correct information, the evidence-based information, and reassure them about what they can and can't eat, so they need a lot of reassurance about these things, because there's lots of entrenched views out there.'* (FG2, community dietitian)

Patients' weight being poorly recorded in primary care records was reported as another barrier to case finding, considered by dietitians to reflect lack of awareness among primary care practitioners regarding its importance. However, GPs felt that the challenges in addressing malnutrition in primary care were related to time constraints — a combination of short appointment times and overwhelming workload:

'I don't think we'd go into great detail about their diet. I mean, the only time I ever do that is when they're diabetic and for that we have 20 minutes' appointments, but in a 10-minute consultation, to take a detailed history about how often they're eating and what they're eating, when they're eating, it can be quite ...' (FG3, GP)

From a system-wide perspective, there was agreement across professional groups that currently most care was related to treatment as opposed to prevention of malnutrition. Funding and budget cuts were at the core of primary care discussions, perceived as main challenges in tackling this issue, either because there were no commissioned services or no funding to support these. On a larger scale, the discordance between public health priorities and the relevance of these to frail older people was another challenge. For dietitians, the current overriding focus on obesity, as well as the lack of a dedicated campaign to promote adequate eating for older people, were both perceived to impede changes in practices:

'And actually it's that acceptance that this is normal ... by the whole population, coupled with the public health messages being vehemently about obesity prevention

and treatment, and there being nothing to suggest that there's ever a time when people might need to gain weight or not lose weight, and that's the real problem.' (FG1, community dietitian)

Common challenges on a patient level included dealing with malnutrition in the context of cognitive impairment or social isolation. Moreover, many health professionals reported finding it difficult to modify established eating habits and behaviours in older people. Again, the need for better patient education and relevant health messages were highlighted; some practitioners acknowledged that even those who were motivated to adopt healthy nutritional habits would often be misled by deeply engrained 'healthy eating' messages that were no longer relevant to them at this life stage. This was further complicated in people with long-term conditions who were traditionally advised to follow restrictive diets for years. Dietitians as well as some GPs felt that education was needed to change habits in this group:

'One of the things that I find quite frustrating is you've got people in their eighties who previously had high cholesterol ... and they're drinking skimmed milk, and they're clearly very thin. And you want to say to them, "Stop drinking skimmed milk ... it's not going to make any difference in terms of your longevity and your cholesterol, because you're on a statin anyway. Drink full-fat milk to maintain your nutrition.' (FG4, GP)

The role of carers was highlighted as important, reflecting the influence of family members' views on dietary choices made by older people:

'I've had in the past a patient where I'd given them advice, they got somebody to buy all of the right things for them, and then a helpful family member came in, saw they'd got all the full-fat milk and yoghurts and things in the fridge, and basically threw them all away and went and bought all the low-fat things again, because what they'd got was unhealthy!' (FG1, community dietitian)

Potential solutions

It was evident from the focus groups that, despite acknowledging the severity of the problem, there was reluctance to take accountability of this issue across the different groups of health professionals. Some responses implied that the task of improving management of malnutrition should be assigned elsewhere. For example, most dietitians thought that the GP was in a unique position to identify the risk of malnutrition, suggesting that annual health checks and flu vaccination could potentially trigger opportunistic case finding and initiate early intervention:

'But I think as well there's going to be key times when you can do that opportunistically, ... like at the flu clinic, they'll all come in for that. And then you can say, get yourself weighed and do it then, you can catch them.' (FG1, dietitian)

However, the majority of GPs felt overwhelmed by workload and did not necessarily see nutrition as within their remit. In many cases GPs were already frustrated by trying to handle existing pressures, which led to a sense of defensiveness in response towards potential interventions:

'But why should it be in general practice? Why should it have to be in general practice? Why can't there just be a centre where the elderly go for their nutrition assessment?' (FG7, GP)

GPs emphasised the role of family carers and education of individuals. Creating community centres providing tailored nutritional advice was not only brought up mostly by primary care teams, but also discussed by some dietitians. It was suggested that individuals from various backgrounds could provide nutritional information, weigh and measure individuals, and refer to other services when needed, or provide practical cooking lessons:

'In the community, maybe if you had a few more like social groups or little cafés that people could drop into, because obviously loneliness can affect with the depression ... And maybe little sessions about cooking, and if you haven't got a lot of money things you can do to eat quite nutritionally ...' (Practice nurse)

Media-generated public health campaigns were suggested as a means of raising awareness, providing information and changing attitudes towards healthy eating for older people. Dietary advice aimed at promoting adequate eating behaviours should be consistent at all levels and across all disciplines:

'... it's almost getting every health and social carer and voluntary person up to the same level, singing from the same hymn sheet, so

that we can all give a consistent message. Because that's the key thing, because if everybody says to you the same thing about eating better and all the rest of it, you're more likely to take notice than if each person gives you a slightly different take on it, you're going to get confused and probably not do anything.' (FG1, community dietitian)

Examples of interventions in primary care were discussed: taking weight and height measurements of patients in the waiting room, training receptionists to provide information, or making educational messages available, for example, through posters:

'I mean, years ago I worked a lot in family care, I said "Why is there not a set of scales in the waiting room, while people are waiting so people can weigh themselves with a ticket and have it put in their notes"…. If you have a set of scales, with a poster, giving some basic information.' (FG1, community dietitian)

Primary care teams discussed the possibility of training healthcare assistants (HCA) to aid in malnutrition identification:

'I think the HCA idea is probably the most realistic, because it wouldn't require any extra funding and it's something that could be provided relatively easily for patients, capturing them when they're coming in for something else would be ideal if there was time for that.' (FG6, GP)

One GP with a special interest in nutrition and one of the nurses suggested a specialist community clinic would also be an option:

'… I guess theoretically being funded through the CCG to provide a specialist service within the local community and … each CCG would have to fund it I guess, which would be the main thing. Then offering like any other GP with a special interest specialist clinics mainly for nutrition problems, but capturing people you see through clinical work outside of that as well who might be suitable.' (FG6, GP)

DISCUSSION

Summary

Findings from this qualitative study show that primary care and community health professionals perceive malnutrition as a multifaceted problem, including patient, healthcare practitioner, health system, and societal factors. Despite professional agreement that there is a gap in care currently provided to frail older people at risk of malnutrition, there appears to be a lack of ownership of the problem and conflicting views regarding further management. On one hand, primary care professionals face barriers associated with time constraints, increasing workload, and lack of training in nutrition. On the other hand, community teams including MDT and dietitians think that the GP is best placed to identify an older person at risk of malnutrition and suggest potential opportunistic interventions that could take place in primary care, for example, during annual health checks or flu vaccinations. Education should be provided to frail older people and their carers to dismantle longstanding erroneous beliefs regarding potentially harmful restrictive diets. Healthy eating messages should be harmonised across public health campaigns and advice that is provided by health professionals.

Strengths and limitations

The main strengths of this qualitative study are that a large number of health professionals were interviewed across different disciplines working with frail older people from a variety of urban and suburban areas to capture diversity in views and practices. Lay members were included as part of the research team throughout the study, from concept to completion. The multidisciplinary expertise of the research team gave valuable insight regarding implications for future practice.

A potential limitation of the study is that the data were mostly obtained through focus groups. This study design facilitates the inclusion of a larger number of participants compared with individual interviews in a time-efficient manner. However, individual experiences may not be explored to the same degree as they would on a one-to-one basis. Moreover, the quality of data obtained can also be influenced by the dynamics within the team, as a result of pre-established hierarchy and other interprofessional relationships.

Comparison with existing literature

The authors' previous qualitative research showed that older people at risk of malnutrition are often unaware of being underweight and do not consider it as a problem. Although informal carers are often very concerned regarding weight loss of the older person whom they care for, they are usually not provided with any dietary advice on how to prevent further weight loss.[24] This opinion is supported by the current views of healthcare professionals, who

agree that more education of individuals is needed. Surveys have suggested that healthcare professionals lack knowledge, find it difficult to identify patients in need of nutritional therapy, lack techniques for identifying malnourished patients, and believe it difficult to change dietary behaviours in older people.[26,29] Malnutrition training is not currently included in nutrition courses taught at nearly 30% of European educational institutions for nurses.[30] A Delphi study among Dutch GPs showed that the top three nutrition topics were diabetes mellitus, hypercholesterolaemia, and obesity, whereas nutrition specific to older people ranked as lower priority.[31] This reflects the historical focus in medical training where nutrition education has been traditionally used for the prevention of cardiovascular disease. It also echoes the views of dietitians in this current study who were concerned about misleading advice given by medically trained staff recommending restrictive (for example, low-fat) diets that are no longer relevant to older people and can be potentially harmful.[32]

Nutrition education of older people (involving carers where appropriate) may improve nutrition-related outcomes, although more robust, high-quality studies are needed to ascertain its effectiveness.[33] However, existing research on interventions for malnutrition has largely focused on the use of ONS,[34–36] although not specifically for frailty. In this current study many dietitians and some GPs expressed concerns over financial implications of ONS and acknowledged the need for regular review of ONS prescriptions.

Implications for practice

Future interventions to address malnutrition in frailty could be delivered in a tiered approach. The large number of people who are affected by both frailty and malnutrition and the poor outcomes associated with these two conditions should make this area a strategic priority to be considered by policymakers. More funding should become available at the primary care level to support active case finding of malnutrition in frail older people. Nutritional screening of frail older people could take place in primary care by healthcare assistants during annual health checks or vaccinations. Within such a setting, frail older people identified as being malnourished or at risk, along with their carers, could be provided with nutrition education. Potentially, such input could be incentivised and delivered as part of an enhanced service, which could also involve local specialist clinics. In addition, more available and longer appointments would be needed to address nutrition properly as part of a frailty assessment in general practice and to allow time for care planning and appropriate interventions.

Frail people who are at risk of malnutrition (but not yet malnourished) should be provided with education on healthy eating. An approach of this nature should be coordinated with public health messages challenging entrenched myths around restrictive diets (for example, around diabetes or cardiovascular prevention). Simple preventative advice appropriate to life stage could take place via media promotion and within local communities for older people. Education should be provided to health professionals from undergraduate curriculums to specialty training.

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Ethical approval

The study received favourable opinion by the London Riverside Research Ethics Committee (reference number: 17/LO/1490). All participants provided written informed consent to participate in the study.

Provenance

Freely submitted; externally peer reviewed.

Competing interests

The authors have declared no competing interests.

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