

ORIGINAL ARTICLE

Barriers to nutritional care for the undernourished hospitalised elderly: perspectives of nurses

Helene Dahl Eide, Kristin Halvorsen and Kari Almendingen

Aims and objectives. To identify what nurses experience as barriers to ensuring adequate nutritional care for the undernourished hospitalized elderly.

Background. Undernutrition occurs frequently among the hospitalised elderly and can result in a variety of negative consequences if not treated. Nevertheless, undernutrition is often unrecognised and undertreated. Nurses have a great responsibility for nutritional care, as this is part of the patient's basic needs. Exploring nurses' experiences of preventing and treating undernourishment among older patients in hospitals is therefore highly relevant.

Design. A focus group study was employed based on a hermeneutic phenomenological methodological approach.

Methods. Four focus group interviews with totally 16 nurses working in one large university hospital in Norway were conducted in spring 2012. The nurses were recruited from seven somatic wards, all with a high proportion of older (≥ 70 years) inpatients. The data were analysed in the three interpretative contexts: self-understanding, a critical common-sense understanding and a theoretical understanding.

Results. We identified five themes that reflect barriers the nurses experience in relation to ensuring adequate nutritional care for the undernourished elderly: loneliness in nutritional care, a need for competence in nutritional care, low flexibility in food service practices, system failure in nutritional care and nutritional care is being ignored.

Conclusions. The results imply that nutritional care at the university hospital has its limits within the hospital structure and organisation, but also regarding the nurses' competence. Moreover, the barriers revealed that the undernourished elderly are not identified and treated properly as stipulated in the recommendations in the national guidelines on the prevention and treatment of undernutrition.

Relevance to clinical practice. The barriers revealed in this study are valuable when considering improvements to nutritional care practices on hospital wards to

What does this paper contribute to the wider global clinical community?

- This study provides valuable insight into nutritional care practices related to the prevention and treatment of undernutrition among older inpatients at one large university hospital in Norway.
- The barriers identified are of importance when considering improvements to routines and to the quality of nutritional care practices for the undernourished elderly in hospital wards, although each individual context needs to be considered.
- This study demonstrates that even in an affluent society as Norway, important elements in nutritional care seem to be missing in the hospital setting, implying that the undernourished older inpatients are not identified and treated properly.

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enable undernourished older inpatients to be identified and treated properly.

Key words: elderly, experiences, focus groups, hermeneutics, hospital care, nurses, nutrition, phenomenology, qualitative study

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Introduction

The growing number of older people in developed countries represents a major triumph in medicine and health care. However, ageing bring its own challenges and problems related to disease and functionality. To meet the future demand for specialist health care, there is an urgent need to develop strategies to resolve the major health issues of the older population (Ministry of Health & Care services 2009, The Norwegian Directorate of Health 2012a). Undernutrition occurs frequently among the hospitalised elderly (Volkert *et al.* 2010, Vanderwee *et al.* 2011) and is a major concern because of the variety of negative consequences if it remains untreated. Unfortunately, it is a fact that undernutrition is unrecognised and undertreated among the hospitalised elderly in developed countries (Suominen *et al.* 2007, Volkert *et al.* 2010, Vanderwee *et al.* 2011), and Norway seem to be no exception (Mowe & Bohmer 1991, Norwegian Board of Health Supervision 2013). In 2009, national guidelines were published in Norway to effectively prevent and treat undernutrition in the health and care services (The Norwegian Directorate of Health 2009). Several of the recommendations in the guidelines are mandatory by law and must, for example, be integrated into hospital routines. According to the Norwegian Patients' Rights Act (Lovdata 2001), which is based on international human rights, all patients have the right to receive treatment and care according to their needs. For the undernourished elderly, the right to receive adequate nutritional care is thus regulated by law. Hence, research to explore barriers to preventing and treating undernutrition adequately in the hospitalised elderly is considered highly relevant.

Background

Currently, there is no clear consensus on a definition or a gold standard method for identifying undernutrition (Stratton *et al.* 2003, Norman *et al.* 2008). Malnutrition is a frequently used term for undernutrition in relevant literature, although malnutrition can be defined as a state of nutrition in which deficiency, excess or imbalance of energy, protein or other nutrients cause measurable adverse effects on tissue, function and outcome (Stratton *et al.* 2003). Disease is

the major risk factor (Stratton *et al.* 2003, Norman *et al.* 2008). Moreover, many older people experience impaired function of senses such as taste and smell, as well as oral problems, cognitive impairment and loneliness, which can all contribute to undernutrition (Morley 1997). Undernutrition is associated with increased morbidity, higher mortality rates, more complications and longer hospital stays (Stratton *et al.* 2003, Norman *et al.* 2008), adding to the suffering of the patients.

The Norwegian guidelines on the prevention and treatment of undernutrition state that all patients in hospital care must be screened for nutritional risk on admission to hospital and subsequently on a weekly basis and that patients who run a nutritional risk must be given nutritional treatment (The Norwegian Directorate of Health 2009). The goal of nutritional risk screening is to identify not only already undernourished patients but also those who are at risk of becoming so (Kondrup *et al.* 2003). Information on the patient's nutritional status and treatment must be documented in medical records and communicated in discharge letters to the next level of care (The Norwegian Directorate of Health 2009). Treatment plans must specify nutritional status, intake and needs, and must be accompanied by appropriate nutritional measures that are routinely evaluated. Suitable energy- and nutrient-rich foods in combination with nutritional supplement drinks are the preferred treatment, while artificial nutrition should be considered for patients who are unable to feed themselves adequately.

Clearly defined responsibilities, education and training of hospital staff, cooperation among all staff groups and involvement of the hospital management are defined as essential measures to effectively prevent and treat undernutrition in the hospital setting (Beck *et al.* 2001). These measures were already in 2001 defined as major barriers to proper food service in European hospitals in a nation-based survey conducted by the Council of Europe, where Norway was among the surveyed countries. To integrate nutritional care into hospital routines has, however, proved to be challenging in several European countries (Mowe *et al.* 2006, Rasmussen *et al.* 2006, Bavelaar *et al.* 2008, Khalaf *et al.* 2009, Schindler *et al.* 2010, Tangvik *et al.* 2012). A recent cross-sectional study conducted in a

Norwegian university hospital showed that the implementation of a nutritional strategy improved overall screening performance, but that the number of patients receiving nutritional treatment did not increase (Tangvik *et al.* 2012). There seems to be a discrepancy between nutritional practice and attitudes among nurses and physicians working in Scandinavian hospitals (Mowe *et al.* 2006, Lindorff-Larsen *et al.* 2007, Holst *et al.* 2009). Despite being considered important, recommended nutritional practice is often not carried out. For example, Holst *et al.* (2009) found that 90% of the nurses had a self-reported positive attitude towards nutritional risk screening, even though only half the nurses actually found it to be a general task undertaken on their wards.

Traditionally, nutrition has been a nursing responsibility, as caring for the patients' basic needs is a major nursing task (Kristoffersen *et al.* 2011). Today, nutrition in general is an interdisciplinary field taken care of by several professions in hospitals (The Norwegian Directorate of Health 2009). Nevertheless, by being with the patients in a 24/7 context, the nurses play an important role in both identifying the need for nutritional treatment and implementing appropriate measures. Moreover, nurses represent the largest group of health professionals working in hospitals today. The aim was therefore to identify what nurses experience as barriers to ensuring adequate nutritional care for the undernourished hospitalised elderly. To our knowledge, few studies with a qualitative methodology have researched this, and no such study has previously been conducted in Norway.

Methods

Design

A focus group study was designed and carried out in spring 2012. The study is based on a hermeneutic phenomenological methodological approach as it aimed to explore and interpret the lived meaning of the nurses' own experiences (Kvale & Brinkmann 2009). We wanted to describe the world as experienced by them by going beyond pure description and attempting to discover the meaning that is not immediately apparent (Kvale & Brinkmann 2009). According to Gadamer, knowledge and understanding are generated in a dialectic process between the whole and its constituent parts, whereby the researcher's preconceptions form one integral component (Gadamer 2004). In this study, we strived to keep this balance and we viewed our preconceptions as an essential part of the generation of understanding and knowledge.

Focus groups are particularly useful when the aim is to learn more about people's experiences, attitudes and views in an environment where several people interact (Kitzinger 1995, Morgan 1997). Group interactions are considered to be an important part of the research method, and our participants were encouraged to comment and discuss each other's experiences and points of view (Kitzinger 1995, Morgan 1997, 2010). The aim was not to reach consensus about the issues discussed but to elicit a variety of experiences, attitudes and views (Kvale & Brinkmann 2009).

The moderator (first author) is a clinical dietitian with experience from the home care services. In 2011, she wrote a master's degree thesis on undernutrition and older nursing home residents. The assistant (second author) is an experienced intensive care nurse. She has a master's degree in Nursing Science, a PhD in medical ethics and experience from research on older patients. The project leader (third author) is a professor and clinical dietitian, with experience from the hospital setting and research projects.

Data collection

Setting

The study was conducted in one large university hospital in Norway, providing healthcare services to approximately half a million people living in urban and rural municipalities. The hospital is thus responsible for a heterogenic population, differing with respect to ethnicity and socioeconomic factors. Frequent comorbidity and on average short length of hospital stay among the elderly in Norway mean that the nurses in general face significant challenges during their working day (Ministry of Health & Care services 2009). On the participating hospital wards, the average length of stay for the elderly was between two–four days in 2012. The food service at the hospital uses a cold chain principle organised by way of several ward kitchens that receive food transported from a central kitchen for decentralised heating.

The focus groups were arranged in a quiet room at the hospital or in a building next to it, and the participants were offered light refreshments. We tried to promote an open atmosphere, thereby allowing unanticipated statements and personal experiences to emerge. A moderator and an assistant were present each session.

Pilot study

A pilot study was conducted in March 2012. An interview guide was developed in collaboration with key persons with experience from both the hospital setting and research. Key topics that were focused concerned the identification and

treatment of undernutrition. As we experienced that the participants tended to say what they ought to do in nutritional care rather than what they actually did do, the interview guide was modified to ask more directly for the participants' practical work experience and opinions. For example, we asked the participants to think about their own experiences and concrete situations from the daily work on their wards, when discussing how identification of undernourishment was carried out.

Sampling

We chose a purposive sampling procedure. Sixteen nurses were recruited from seven somatic wards, all with a high proportion of older (≥ 70 years) inpatients (Table 1). The section nurse on each ward recruited the participants. Participation required that the nurses had worked bedside for the last three months in a 50% position or more on the same ward. Totally, four focus groups were conducted, each lasting one and a half hours, and all groups were composed of nurses from different wards to obtain a broad perspective and to enhance discussion. The discussions were audio-taped and transcribed verbatim by the moderator shortly after each session and carefully checked for transcription errors. The first three groups consisted of between four–six nurses in each, while the last group comprised only two nurses. We found that our data were sufficiently saturated after the three-first groups, but we nonetheless decided to conduct the last group to see whether the low number of participants would allow the discussion to dee-

pen and thus encourage new knowledge to appear, a technique recommended by Malterud (2012).

Research ethics

The study was approved by the university hospital's internal privacy commission and by the hospital management. All participants gave their written, voluntary and informed consent prior to participation.

Data analysis

The data generated were analysed in the three interpretative contexts described by Kvale: self-understanding, a critical common-sense understanding and a theoretical understanding (Kvale & Brinkmann 2009). Neither the individual nor the group statements alone were the units for analysis, but we tried instead to seek a balance that recognised an interplay between these two levels (Carey & Smith 1994, Morgan 1997).

In the self-understanding context, the researcher tries to capture what the subjects understand to be the meaning of their statements. To capture these perceptions, we coded the data so that the texts' meanings could more clearly be seen. We chose an editing (data-based) analysis style where the text is reorganised and coded by way of codes developed from the data itself (Crabtree & Miller 1999). Both the assistant and the moderator read through all the transcripts and field notes several times to get a sense of the whole before they discussed and agreed upon some main themes. Based on these themes, the moderator coded the data (Table 2) using the qualitative software program ATLAS.TI (ATLAS.ti version 6.2.15, [Computer software] (1999) Scientific Software Development, Berlin, Germany).

In the critical common-sense understanding context, the researcher goes beyond what is actually expressed, and the meaning of what is said is interpreted by the researcher asking questions of the data. The moderator presented all the coded data units related to a particular code together to explore and interpret the meaning in each coded set. Main codes were retrieved, split into subcodes, spliced and linked together, and summaries were then made (Table 2; Coffey & Atkinson 1996).

In the context of theoretical understanding, a theoretical frame relevant for the study is applied to understand and interpret the theoretical meaning of the data to generate theoretical themes. The national guidelines (The Norwegian Directorate of Health 2009), the regulations in the Patients' Rights Act (Lovdata 2001) and literature on nutrition, the elderly and ageing constituted the theoretical frame of this study. Summaries and theoretical themes were generated by

Table 1 The characteristics of the 16 participants

Gender, <i>n</i>	
Female	15
Male	1
Age, years	
Mean	29.3
Range	23–47
Type of ward, <i>n</i>	
Orthopaedic	3
Upper gastro	2
Lung	4
Cardiology	3
Haematology/infection	1
Neurology/endocrinology	2
Neurology/stroke	1
Experience as nurse, years	
Mean	5.7
Range	1–21
Experience with older inpatients, <i>n</i>	
Some	5
Much	11

Table 2 Example of how the data were structured into subcodes, main codes and theoretical themes

The coded data	Subcode	Main code	Theoretical theme
Participant 2: It's probably us that must take care of.... take care of it (Participant 5: ... maybe remember it), mostly, at least (is interrupted). Participant 5: ... I can gladly...I've experienced several times that the patients have been lying in bed for almost a week. And, maybe we should initiate cabiven (parenteral) treatment, because, well, the physicians have totally forgotten about it, and I feel that we actually must, think most about it in fact. (Participant 4: Mm) Remember it.	Dependent on the nurses	Lonely nursing task	Loneliness in nutritional care

the moderator and discussed with the assistant and the project leader (Table 2). The moderator also validated the theoretical themes to the sense of the whole by re-reading all the original transcripts.

Results

We identified five themes that reflect barriers to ensuring adequate nutritional care for the undernourished elderly – barriers that nurses experience in their daily work on hospital wards.

Loneliness in nutritional care

The nurses expressed a sense of feeling lonely in ensuring nutritional care for the undernourished elderly. Although responsibility of nutritional care was not delegated specifically to them in internal clinical guidelines, they still considered themselves responsible as no one else assumed responsibility. They reported frustration concerning the physicians' low involvement and engagement in nutritional care, and they experienced that the physicians often just nodded to whatever they suggested. Several of the nurses also expressed that physicians' backing in nutritional care made it easier to prioritise it, and physicians' involvement was therefore often requested:

Participant 11, focus group 3: But it sometimes actually happens that I see physicians prescribe for example nutritional drinks and Calogen and such like in the medical record. And then it's, then they're also interested in getting it to... And then it's actually easier to remember it too

Clinical dietitians were reported as a useful and necessary resource, but their availability was described as too low. Some of the nurses were uncertain about which patients could be referred and also reported that their involvement sometimes resulted in too time-consuming and complex treatment plans. When older patients were transferred from

nursing homes to the hospital, the nurses requested more nutritional information from the nursing homes, to serve as a point of reference for nutritional care.

A need for competence in nutritional care

The nurses reported lacking sufficient knowledge and skills to identify and treat undernourished older patients. They were uncertain about how to evaluate nutritional status, estimate nutritional needs and measure energy and nutrient intake. The published guidelines were also mostly unknown. The concept of undernutrition seemed to be unfamiliar to most of them, and they often used terms like underweight, skinny and low food intake to describe it:

Participant 6, focus group 1: And also it's that when you're thinking undernutrition, you're thinking about those skinny, skinny, skinny persons. You don't think so much about those who are big and totally malnourished, and who in that sense are undernourished

Several of the nurses claimed to have more competence in initiating nutritional treatment, although they seemed to lack skills for individualising treatment and estimating nutritional needs and intake. One of the nurses, for instance, stated that they always as a standard gave 2000 kcal to patients treated with enteral nutrition. The nurses also expressed a lack of in-depth knowledge about risk factors for and consequences of undernutrition during illness. The nurses requested more internal courses on nutritional care at the hospital, which they also believed could remind them of its importance.

Low flexibility in food service practices

The nurses described how low flexibility in food service practices at the hospital gave them few opportunities to individualise meals and mealtimes for the undernourished elderly. They reported a lack of variation in the food

served, and few choices for snacks between meals. In their experience, patients with long stays or several readmissions were bored with the food served. Strict time limits for food storing could also result in missed meals for patients undergoing treatment (i.e. X-ray, CT, MR). Several of the nurses were frustrated about the complex ordering system and the tight time limits for ordering meals and maintained that this prevented them from using it so often:

Participant 9, focus group 2: And it's pretty complicated to get it done, and if you don't do it by a certain time, then it's kind of, if you haven't ordered it before half past nine ... (Participant 7:Yes) ... and you ask at dinner-time, then it's too late

A recent change that increased the time between meals served was considered positive by the nurses, although breakfast was still served too late. The nurses expressed some distrust of the kitchen staff and had experienced that they sometimes failed to serve the preferred meals ordered. They were also frustrated about strict rules regarding giving food to relatives.

System failure in nutritional care

The nurses reported the lack of a system to ensure nutritional care for the undernourished elderly. Systematic screening of nutritional risk on admission was clearly not integrated into daily routines, and in general, nutritional treatment was only initiated occasionally. There did appear to be some routines for patients with longer stays, as these patients were often weighed weekly. A need for a system change in nutritional care was expressed, and the implementation of routine weight measurements on admission was suggested. Clinical observations were in general used to identify undernutrition rather than objective measurements such as weight loss and body mass index. Consequently, only the elderly who were clearly underweight or those with a very low food intake seemed to be identified:

Participant 13, focus group 3: Well, I can say that we, we don't document the undernourished patients, we don't document anything about the patients on admission in order to evaluate them. So, but we focus on...er... observing mealtimes and making sure that they get all the meals, and then think about what we should do if they don't eat what you think of as normal intake. But is there a system for it? There isn't

The nurses reported a lack of suitable weighing apparatus, which made it very time-consuming to weigh patients. Several of the nurses also claimed that they needed internal clinical guidelines for the identification and treatment of undernutrition. Inadequate documentation routines made it

difficult for the nurses to trust what was written about nutrition in the patients' medical record, which in their experience often resulted in over-documentation on, for example, food intake. Weight was also recorded at different places.

Nutritional care is being ignored

The nurses experienced that nutritional care was given little attention in the hospital. Hectic working days, focus on acute illness treatment and short hospital stays resulted in a neglect of nutritional care. The nurses described the hospital setting as reductionist, where the health professions are so specialised in their medical fields that nutritional care is being ignored. Only if the nutritional problems were an important factor for the patient's medical condition would there be focus on such care. Weight measurements were also mainly taken for reasons other than ensuring nutritional care, for example, to control the fluid balance:

Participant 4, focus group 1: Well, actually I experience that our physicians are mostly concerned about operating on the patients. When the patients have had the operation and the X-ray is fine, and they're mobilized and done with treatment, and they're undernourished, then that isn't something we're supposed to treat. No

The nurses expressed difficulty in raising the priority of nutritional care compared to other nursing activities due to a high workload and short stays in hospital, which also affected the quality of such care. Relatives were therefore seen as a resource for feeding the patients. Nutritional supplement drinks were described as a way of doing something in hectic working days, although they knew the patients often did not drink them. Some of the nurses reported sometimes feeling relieved when patients rejected meals, as they saved time. The nurses described a high focus on hospital discharge, and no allowance made for longer stays just to see a clinical dietitian. They also reported that shorter stays made them feel less responsible for nutritional care, especially if the patient lived in a nursing home.

Discussion

The described barriers reveal that important elements in nutritional care seem to be missing in clinical practice, despite the fact that several of the recommendations in the national guidelines are mandatory by law. As a result, undernourished older patients may not be given adequate nutritional care in line with their needs, which can lead to poor patient outcomes and increased suffering for the patients. Every patient has a basic human right to have

their nutritional needs met, and it is unacceptable that such fundamental needs are not fulfilled.

The nurses mentioned few barriers specifically related to the patients' age apart from poor appetite and the need for feeding assistance. The described barriers were more dependent on the hospital structure and organisation and on low nutritional competence among the nurses themselves, which correspond to the barriers identified by the Council of Europe in 2001 (Beck *et al.* 2001). Clearly, the nurses sought after a change in the nutritional care practices at the hospital, and the barriers identified are of importance when considering improvements to the quality and routines for nutritional care for the undernourished elderly.

Assignment of responsibility

Despite the fact that nutrition is a multidisciplinary field that often involves several health professions in hospitals, the nurses in our study experienced that they mostly stood alone in ensuring nutritional care, which is consistent with a comparable study where the nurses described a lack of support from other colleagues (Khalaf *et al.* 2009). Our results show that the nurses and the other health professions' responsibilities and roles related to such care should be more formally defined. The lack of proper instructions and of assignment of responsibility means that nobody is clearly accountable for the patients' nutrition, and undernourishment is more likely to be left unrecognised and undertreated (Beck *et al.* 2001, Kondrup *et al.* 2002, Mowe *et al.* 2006, Ross *et al.* 2011). Moreover, poor cooperation among all hospital staff groups has been defined as a common barrier to good nutritional practice (Beck *et al.* 2001, Ross *et al.* 2011) as it may result in inadequate nutrition in the chain of care. Interdisciplinary work among health professionals is also pointed out in white papers and health regulations as vital to meet the complex needs of the elderly (Lovdata 2001, Ministry of Health and Care services 2009, 2013).

Knowledge and skills

The nurses in our study reported that they generally found it difficult to identify undernutrition and estimate nutritional status, needs and intake. They often used terms like underweight, skinny and low food intake to describe undernourishment, which corresponds to the expression the 'thin ones' used in Khalaf *et al.* (2009). Insufficient knowledge in identifying and treating undernutrition has been self-reported as the most common cause for inadequate nutritional practice in a survey among physicians and nurses working in Scandinavian hospitals (Mowe *et al.* 2008). A general need for

increased nutritional knowledge in the health and care sector has been stated in a number of political documents in Norway since the 1970s (The Norwegian Directorate of Health 2012b). There is a lack of proper education in nutrition in most healthcare education programmes (Ministry of Education and Research 2012), as well as a low number of clinical dietitians working in hospitals and in the community (The Norwegian Directorate of Health 2012b). Knowing that adequate nutritional status has an exclusive impact on treatment outcome, and viewed in the light of a specific focus on patient safety and quality in the healthcare services, it is alarming to see that nutritional competence is given such low priority in the hospital setting.

Individualising meals

Other qualitative studies have reported that nurses are often busy with other tasks, such as documentation and medication, rather than giving assistance in eating (Kowanko *et al.* 1999, Xia & McCutcheon 2006, Khalaf *et al.* 2009, Ross *et al.* 2011). Although the nurses in our study regarded helping and motivating the patients during mealtimes as important, a distinct lack of resources and time resulted in them prioritising the most sick and needy patients. The nurses also reported that low flexibility in the food service practices made it difficult for them to individualise meals and mealtimes for the patients. Other qualitative studies have also shown that access to food outside mealtimes is often limited in hospitals (Kowanko *et al.* 1999, Ross *et al.* 2011). The Norwegian regulations for setting priorities states that basic care such as nutrition is always to be given priority if the patients are in need of care to accomplish adequate nutritional status (Ministry of Health and Care services 1997). This priority seemed to be almost impossible for the nurses in our study to practise.

Hospital management

The hospital management has the overall responsibility for creating optimal environments for the hospital staff so they can ensure nutritional care for their patients (Beck *et al.* 2001, The Norwegian Directorate of Health 2009). Holst *et al.* (2009) found a significant association between wards with a well-organised structure for nutrition and a good nutritional practice. The nurses in our study expressed frustration regarding the established structure and the organisation of nutrition, which made it more difficult for them to identify and treat the undernourished elderly. Consequently, they sought a change in nutritional care practices to improve the routines and quality. It is interesting to note

that strongly recommended practices were not sufficiently integrated into the hospital routines, which is in accordance with other studies that have researched nutritional care practices in European hospitals (Mowe *et al.* 2006, Rasmussen *et al.* 2006, Bavelaar *et al.* 2008, Schindler *et al.* 2010). Moreover, the fact that best practices and national guidelines are not followed in the clinical setting to ensure what is best for the patients is of moral concern.

The acute hospital setting

The average length of stay is currently decreasing in Norwegian hospitals due to the Coordination Reform (Ministry of Health and Care services 2009). Several of the nurses in our study experienced that short stays contributed to a neglect of nutritional care and that the responsibility was therefore often transferred to municipal health care. Similar results have been reported by Khalaf *et al.* (2009) and Ross *et al.* (2011), the latter found that the nurses felt powerless to prioritise nutrition in the acute hospital setting and that other medical problems were addressed first. Khalaf *et al.* (2009) also revealed a denial of the existence of undernourishment, which could hinder the nurses from discussing or even finding out that patients were undernourished. We found that nutritional care was ignored, which might be seen as a denial of the existence of and the responsibility for nutritional care in a hospital setting. The high turnover in hospitals should not lead to the misconception that nutritional care is not important, and in a hospital setting, it is unacceptable that undernutrition is not properly identified and treated (Kondrup *et al.* 2003). As undernutrition may play a major role in increased complications, expected short stays might very easily become long stays if undernutrition is not adequately prevented and treated, resulting in more suffering for the patients and more resources spent on health care.

Methodological considerations

In qualitative research, the goal is to enhance the understanding of the phenomenon being studied (Kvale & Brinkmann 2009). Hence, the results from this study cannot be generalised, but they may have transferability to similar contexts (Malterud 2001). The sample size is small, and all the nurses were recruited from one hospital. However, the hospital is large and provides healthcare services for a heterogeneous population, covering about 10% of the Norwegian population. The barriers identified in this study reflect the nurses' perspectives, and other barriers may have been expressed if we had arranged groups of other health professionals. The researchers' preconceptions have a major influ-

ence on the entire qualitative research process (Malterud 2001). To ensure a rigorous representation of results, both the moderator and the assistant were involved in the analysis, and the results were discussed with the project leader. At the end of each session, the assistant also offered a brief summary of the discussion, which the participants were invited to comment on. Focus group studies are often criticised for not taking group interactions into account in the analysis (Kitzinger 1994). Although group interactions are essential to produce focus group data, they might not constitute the data themselves (Morgan 2010). Group interactions were not part of the aim in this study and were therefore not incorporated in the analysis. It can be challenging to preserve the individual experiences in a group context, which are essential in qualitative research based on a hermeneutic phenomenological methodological approach (Bradbury-Jones *et al.* 2009). In our study, we arranged small groups and structured them relatively high to ensure that everyone had the opportunity to speak (Bradbury-Jones *et al.* 2009). Moreover, all participants had a common professional background so that they would feel more comfortable when sharing their experiences and points of view (Morgan 1997, Bradbury-Jones *et al.* 2009).

Conclusion

This study provides information about barriers experienced by nurses who work bedside on hospital wards in relation to ensuring adequate nutritional care for the undernourished elderly. Five barriers were identified: loneliness in nutritional care, a need for competence in nutritional care, low flexibility in food service practices, system failure in nutritional care and nutritional care is being ignored. Nutritional care at the university hospital clearly has its limits within the hospital structure and organisation, but also regarding the nurses' competence. The described barriers reveal that important elements in nutritional care seem to be missing in clinical practice, implying that the undernourished elderly are not identified and treated properly. The results are worrying as screening and treating undernutrition can in general improve patient outcomes and be cost-effective. Future studies should focus on how nutritional care practices can effectively be improved in the hospital setting so that undernourished older patients are identified and treated according to their needs.

Relevance to clinical practice

This study provides a valuable insight into the nutritional care practices related to the prevention and treatment of

undernutrition among older patients at one large university hospital in Norway. The results imply a significant need for a greater focus on nutritional care so that undernourished elderly can be identified and treated properly as stipulated in the recommendations in the national guidelines on the prevention and treatment of undernutrition. Other studies that have researched nutritional care practices in European hospitals show similar results, which indicates that a fundamental part of patients' basic needs is not prioritised in the hospital setting today. This is of imperative clinical and moral concern. The barriers identified and illuminated are important to consider when improving routines and the quality of nutritional care for this group of patients. However, each context must be considered individually as this study cannot be generalised.

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Disclosure

The authors have confirmed that all authors meet the ICMJE criteria for authorship credit (www.icmje.org/ethical_1author.html), as follows: (1) substantial contributions to conception and design of, or acquisition of data or analysis and interpretation of data, (2) drafting the article or revising it critically for important intellectual content and (3) final approval of the version to be published.

References

- Bavelaar JW, Otter CD, van Bodegraven AA, Thijs A & van Bokhorst-de van der Schueren MA (2008) Diagnosis and treatment of (disease-related) in-hospital malnutrition: the performance of medical and nursing staff. *Clinical Nutrition* **27**, 431–438.
- Beck AM, Balknas UN, Furst P, Hasunen K, Jones L, Keller U, Melchior JC, Mikelsen BE, Schauder P, Sivonen L, Zinck O, Oien H & Ovesen L (2001) Food and nutritional care in hospitals: how to prevent undernutrition – report and guidelines from the Council of Europe. *Clinical Nutrition* **20**, 455–460.
- Bradbury-Jones C, Sambrook S & Irvine F (2009) The phenomenological focus group: an oxymoron? *Journal of Advanced Nursing* **65**, 663–671.
- Carey MA & Smith MW (1994) Capturing the group effect in focus groups: a special concern in analysis. *Qualitative Health Research* **4**, 123–127.
- Coffey A & Atkinson P (1996) *Making Sense of Qualitative Data. Complementary Research Strategies*, 1st edn. SAGE Publications, Thousand Oaks, CA.
- Crabtree BF & Miller WL (1999) *Doing Qualitative Research*, 2nd edn. SAGE Publications, Thousand Oaks.
- Gadamer HG (2004) *Truth and Method*, 3rd edn. Continuum Publications, Wiltshire, UK.
- Holst M, Rasmussen HH & Unosson M (2009) Well-established nutritional structure in Scandinavian hospitals is accompanied by increased quality of nutritional care. *e-SPEN, the European e-Journal of Clinical Nutrition and Metabolism* **4**, 22–29.
- Khalaf A, Berggren V & Westergren A (2009) Caring for undernourished patients in an orthopaedic setting. *Nursing Ethics* **16**, 5–18.
- Kitzinger J (1994) The methodology of focus groups: the importance of interaction between research participants. *Sociology of Health and Illness* **16**, 103–121.
- Kitzinger J (1995) Qualitative research. Introducing focus groups. *British Medical Journal* **311**, 299–302.
- Kondrup J, Johansen N, Plum LM, Bak L, Larsen IH, Martinsen A, Andersen JR, Baernthsen H, Bunch E & Lauesen N (2002) Incidence of nutritional risk and causes of inadequate nutritional care in hospitals. *Clinical Nutrition* **21**, 461–468.
- Kondrup J, Allison SP, Elia M, Vellas B & Plauth M (2003) ESPEN guidelines for nutrition screening 2002. *Clinical Nutrition* **22**, 415–421.
- Kowanko I, Simon S & Wood J (1999) Nutritional care of the patient: nurses' knowledge and attitudes in an acute care setting. *Journal of Clinical Nursing* **8**, 217–224.
- Kristoffersen NJ, Nortvedt F & Skaug E-A (2011) *Grunnleggende sykepleie [Basic nursing care]*, 2nd edn. Gyldendal akademisk, Oslo, Norway.
- Kvale S & Brinkmann S (2009) *Interviews: Learning the Craft of Qualitative Research Interviewing*, 2nd edn. SAGE Publications, Los Angeles, CA.
- Lindorff-Larsen K, Hojgaard Rasmussen H, Kondrup J, Staun M & Ladefoged K (2007) Management and perception of hospital undernutrition – a positive change among Danish doctors and nurses. *Clinical Nutrition* **26**, 371–378.
- Lovdata (2001) *Lov om Pasient- og Brukerrettigheter [The (Norwegian) Patient's Rights Act]*. LOV 1999-07-02 nr 63. Ministry of Health and Social Affairs. Available at: <http://lovdata.no/lov/1999-07-02-63> (accessed 29 January 2014).
- Malterud K (2001) Qualitative research: standards, challenges, and guidelines. *Lancet* **358**, 483–488.
- Malterud K (2012) *Fokusgrupper som Forskningsmetode for Medisin og Helsefag [Focus Groups as a Research Method in Medicine and Health Care]*, 1st edn. Universitetsforlaget, Oslo, Norway.

- Ministry of Education and Research (2012) *Meld.St.13 (2011–2012): Ut-danning for Velferd. Samspill i Praksis [Report nr.13 to the Storting (2011–2012): Education for Welfare. Cooperation in Practice]*. Oslo, Kunnskapsdepartementet. Available at: <http://www.regjeringen.no/pages/37006956/PDFS/STM201120120013000DDDPDFFS.pdf> (accessed 29 January 2014).
- Ministry of Health and Care services (1997) *Prioritering på ny. Gjennomgang av Retningslinjer for Prioriteringer innen norsk Helsetjeneste (NOU 1997:18) [Prioritizing again. Revision of Guidelines for Priorities in the Norwegian Health and Care Services (NOU 1997:18)]*. Oslo, Sosial- og helsedepartementet. Available at: <http://www.regjeringen.no/Rpub/NOU/19971997/018/PDFA/NOU199719970018000DDDPDFA.pdf> (accessed 30 January 2014).
- Ministry of Health and Care services (2009) *Report No. 47 (2008-2009) to the Storting. Summary in English: The Coordination Reform. Proper treatment – At the Right Place and Right Time*. Oslo. Available at: http://www.regjeringen.no/upload/HOD/Samhandling%20engelsk_PDFS.pdf (accessed 30 January 2014).
- Ministry of Health and Care services (2013) *Meld. St. 29 (2012–2013): Morgendagens Omsorg [Report nr.29 to the Storting (2012-2013): Care of Tomorrow]*. Oslo, Helse- og omsorgsdepartementet. Available at: <http://www.regjeringen.no/pages/38301003/PDFS/STM201220130029000DDDPDFA.pdf> (accessed 30 January 2014).
- Morgan DL (1997) *Focus Groups as Qualitative Research*, 2nd edn. SAGE Publications, Thousand Oaks, CA.
- Morgan DL (2010) Reconsidering the role of interaction in analyzing and reporting focus groups. *Qualitative Health Research* **20**, 718–722.
- Morley JE (1997) Anorexia of aging: physiologic and pathologic. *American Journal of Clinical Nutrition* **66**, 760–773. Available at: <http://www.ncbi.nlm.nih.gov/pubmed/9322549> (accessed 30 January 2014).
- Mowe M & Bohmer T (1991) The prevalence of undiagnosed protein-calorie undernutrition in a population of hospitalized elderly patients. *Journal of the American Geriatrics Society* **39**, 1089–1092.
- Mowe M, Bosaeus I, Rasmussen HH, Kondrup J, Unosson M & Irtun O (2006) Nutritional routines and attitudes among doctors and nurses in Scandinavia: a questionnaire based survey. *Clinical Nutrition* **25**, 524–532.
- Mowe M, Bosaeus I, Rasmussen HH, Kondrup J, Unosson M, Rothenberg E & Irtun O (2008) Insufficient nutritional knowledge among health care workers? *Clinical Nutrition* **27**, 196–202.
- Norman K, Pichard C, Lochs H & Pirlich M (2008) Prognostic impact of disease-related malnutrition. *Clinical Nutrition* **27**, 5–15.
- Norwegian Board of Health Supervision (2013) *Not Just One Health Problem. Summary in English of Countrywide Supervision 2011–2012 of Specialized Health Services. Frail Elderly People Treated for Fracture of the Hip*. <http://www.helsetilsynet.no/no/Norwegian-Board-of-Health-Supervision/Publications/Report-of-the-Norwegian-Board-of-Health-Supervision-2013/Not-just-one-health-problem-Summary-of-countrywide-supervision-2011-2012-elderly-people-treated-for-fracture-of-the-hip/> (accessed 30 January 2014).
- Rasmussen HH, Kondrup J, Staun M, Ladefoged K, Lindorff K, Jorgensen LM, Jakobsen J, Kristensen H & Wengler A (2006) A method for implementation of nutritional therapy in hospitals. *Clinical Nutrition* **25**, 515–523.
- Ross LJ, Mudge AM, Young AM & Banks M (2011) Everyone's problem but nobody's job: staff perceptions and explanations for poor nutritional intake in older medical patients. *Nutrition & Dietetics* **68**, 41–46.
- Schindler K, Pernicka E, Laviano A, Howard P, Schutz T, Bauer P, Grecu I, Jonkers C, Kondrup J, Ljungqvist O, Mouhieddine M, Pichard C, Singer P, Schneider S, Schuh C & Hiesmayr M (2010) How nutritional risk is assessed and managed in European hospitals: a survey of 21,007 patients findings from the 2007–2008 cross-sectional nutritionDay survey. *Clinical Nutrition* **29**, 552–559.
- Stratton RJ, Green CJ & Elia M (2003) *Disease-related Malnutrition: An Evidence-based Approach to Treatment*, 1st edn. CABI, Wallingford, UK.
- Suominen MH, Sandelin E, Soini H & Pitkala KH (2007) How well do nurses recognize malnutrition in elderly patients. *European Journal of Clinical Nutrition* **63**, 292–296.
- Tangvik RJ, Guttormsen AB, Tell GS & Ranhoff AH (2012) Implementation of nutritional guidelines in a university hospital monitored by repeated point prevalence surveys. *European Journal of Clinical Nutrition* **66**, 388–393.
- The Norwegian Directorate of Health (2009) *Nasjonale Faglige Retningslinjer for Forebygging og Behandling av Underernæring, in Norwegian [National Professional Guidelines on Prevention and Treatment of Malnutrition]*. Oslo. Available at: [http://helse-direktoratet.no/publikasjoner/nasjonalfaglig-retningslinje-for-forebygging-og-behandling-av-underernering.PDF](http://helse-direktoratet.no/publikasjoner/nasjonalfaglig-retningslinje-for-forebygging-og-behandling-av-underernering/Publikasjoner/nasjonalfaglig-retningslinje-for-forebygging-og-behandling-av-undererning.PDF) (accessed 30 January 2014).
- The Norwegian Directorate of Health (2012a) *Behovet for Spesialisert Kompetanse i Helsetjenesten. En Status-, Trend- og Behovsanalyse fram mot 2030 [The Need for Specialized Competence in Health and Care Services. A Status, Trend and Needs Analysis up to 2030]*. Oslo. Available at: <http://helsedirektoratet.no/publikasjoner/behov-for-spesialisert-kompetanse-i-helsetjenesten/Publikasjoner/behov-for-spesialisert-kompetanse-fram-mot-2030.pdf> (accessed 30 January 2014).
- The Norwegian Directorate of Health (2012b) *Ernæringskompetanse i helse- og Omsorgstjenesten [Nutritional Competence in the Health and Care Services]*. Oslo. Available at: <http://www.helsedirektoratet.no/publikasjoner/ernæringskompetanse-i-helse-og-omsorgstjenesten/Publikasjoner/ernæringskompetanse-i-helse-og-omsorgstjenesten.pdf> (accessed 30 January 2014).
- Vanderwee K, Clays E, Bocquaert I, Verhaeghe S, Lardennois M, Gobert M & Defloor T (2011) Malnutrition and nutritional care practices in hospital

wards for older people. *Journal of Advanced Nursing* **67**, 736–746.
 Volkert D, Saeglit C, Gueldenzoph H, Sieber CC & Stehle P (2010) Undiag-

nosed malnutrition and nutrition-related problems in geriatric patients. *The Journal of Nutrition, Health & Aging* **14**, 387–392.

Xia C & McCutcheon H (2006) Meal-times in hospital – who does what? *Journal of Clinical Nursing* **15**, 1221–1227.

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