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Hospital mealtimes: action research for change?

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Poor nutritional care within the hospital setting continues despite decades of work chronicling and measuring the problems. To address the problem changes in practice have been attempted to improve the patients' experience of mealtimes. In order to implement patient-centred mealtimes for older patients by changing the focus from institutional convenience to one that focuses on the requirements of the patients, an action research approach has been used that focuses on action and change, and thus appears to have much to offer those who seek to change practice. The present paper focuses on the first two phases in a three-phase approach. In phase one the nature of everyday mealtime care and the wider context are explored using focus groups, interviews and observations. The data fall into three main themes that all impact on patients' experiences of mealtimes: institutional and organisational constraints; mealtime care and nursing priorities; eating environment. Following feedback of phase 1 findings to staff and identification of areas of concern a model of practice development was selected to guide the change process of the second phase. Changes to mealtime nursing practice and the ward environment have been made, indicating that action research has the potential to improve the mealtime care of patients.

Hospital mealtimes: Older patients: Action research

Poor nutrition has been recognised as a problem in the hospital setting for decades (for example, see Hill *et al.* 1977; Coates, 1985; Lennard-Jones, 1992; McWhirter & Pennington, 1994), with older patients being particularly vulnerable (Lehmann *et al.* 1991; Tierney, 1996). Under-nutrition has consequences for the individual affected, such as increased mortality and morbidity, increased risk of infection and reduced quality of life. In addition, and of particular importance to policy makers, poor nutrition increases both the length of hospital stay and the chance of readmission (Department of Health, 2001*a*). There is evidence that much of this undernutrition is both pre-ventable and treatable (Biernacki & Barratt, 2001). However, although this knowledge of the prevalence of undernutrition in institutional settings is widely available, the problem remains.

A number of reasons have been proposed for the inci-dence and prevalence of undernutrition, including: changes to meal delivery systems, divorcing nurses from both the process of mealtimes and the associated patient care (Carr & Mitchell, 1991); the demise of the hospital matron (Department of Health, 2003); poor hospital food and inflexible catering (Association of Community Health Councils, 1997); inadequate nutritional education of both nursing (Palmer, 1998) and medical staff (Royal College of Physicians, 2002). Responsibilities in relation to food, mealtimes and nutrition are complex and ill defined (Manthorpe & Watson, 2003), with different tasks falling across and between both professional disciplines and depart-ments (Leat, 1998). Helping patients with eating is frequently delegated to less-qualified staff, thus reinforcing the idea that mealtime care is unskilled work and unimportant.

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Currently, solutions have focused on developing and using tools to identify those patients at risk of under-nutrition (Lehmann, 1989; Lennard-Jones, 1992; Closs, 1993), using specific interventions, such as refeeding regimens (Lehmann, 1989) and supplemental feeds (Bastow *et al.* 1983; Delmi *et al.* 1990; Woo *et al.* 1994), and improving hospital food, introduced in the National Health Service Plan outlined by the Department of Health (2000). More recently, the Department of Health (2001*b*) has launched a national initiative that aims to improve standards of fundamental aspects of care through the use of a benchmarking tool; benchmark three focuses on food and nutrition. The application of nutritional evidence to practice is difficult; for example, Gosney (2003) reports that supplemental feeds are wasted more often than they are drunk, and introducing nutritional assessment on its own does little to improve either practice at mealtimes or nutritional status (Jordan *et al.* 2003).

Thus, although there is evidence on which to base changes in practice, and the policies and initiatives offer structures and processes, the problem at the frontline of practice remains. Food still fails to reach the stomachs of patients, indicating that the complexity of mealtime care in institutional settings has not been sufficiently addressed. However, eating is a complex activity with associated social, psychological and biological aspects, and hospital mealtimes take place within the complex arena of, and thus are influenced by, clinical practice that has been described as a 'swampy lowland' (Schön, 1983).

If the patients' experience of mealtimes is to be improved, efforts to re-engage nurses in the process are essential. A project is currently being undertaken that attempts to address poor mealtime care by engaging with, and trying to introduce changes to, the ward culture in which mealtimes take place.

Implementing change in mealtime care

The project is being carried out within a twenty-six-bed unit providing care for older patients with complex discharge needs. Older patients are referred to the unit from throughout the Acute NHS Trust when the acute stage of the condition that led to hospital admission has been stabilised and treated but immediate return home is not possible because of resulting frailty and complex diagnosis that necessitates a change in living or care arrangements. Patients may be on the unit for between 2 weeks and several months.

Breakfast on the unit comprises cereal and toast. Food for the midday and evening meals is provided through a cook–chill process, with the food being regenerated on the ward in a trolley. The food is served by the nursing staff, which gives flexibility in terms of food choice and portion size at ward level and immediately before eating. This system means that patients do not have to order food in advance.

The aims of the project were to implement patient-focused mealtime practice for older patients within a hospital unit, and to promote healthy ageing through improving mealtime care by working towards the implementation of a patient-focused and enabling culture. The objectives were to work with staff (using an action research approach) to help them to describe and explore the current mealtime environment on the unit, to explore with staff ways of focusing mealtimes towards the needs of patients and to help staff to make changes to the mealtime environment and their practice.

Action research

The research approach that was selected was action research, which was developed by Kurt Lewin (see Hart & Bond, 1995) >50 years ago and over the years has been used in a range of settings, including health care. Lewin argued that the work of social scientists should be able to improve conditions for individuals (Williamson & Prosser, 2002). Action research aims to generate knowledge about social systems as well as attempting change (Hart & Bond, 1995). Waterman *et al* (2001) provide a useful definition of action research as '. . . a period of inquiry that describes, interprets and explains social situations while executing a change intervention aimed at improvement and involvement. It is problem-focused, context specific and future orientated'.

Action research puts into operation a cyclical process of 'look, think and act' (Koch & Kralik, 2001) in order to effect change. Four main features are central to an action research approach, i.e. collaboration between researcher and practitioner, the solution of practical problems, change in practice and the development of theory (Holter & Schwartz-Barcott, 1993). Collaboration between the researcher and practitioner(s) is a key feature of this research approach; in the present study the researcher (A.D.) collaborated with members of staff who are co-researchers (in this case staff nurses) from the unit (C.W., L.A. and A.C.). The practitioner is the 'insider' on the research team and provides knowledge of the setting, practice and culture being studied. The researcher is the 'outsider' who brings expertise in theory and research, but has to learn about the setting.

The change to practice attempted during action research is dependent on the nature of the problem identified in collaboration with the practitioners. In this case the initial issue was raised as a problem by one of the authors (C.W.) as part of a post-qualifying degree course assignment.

In recent years there has been an increase in the interest and use of this method in health care possibly as a result of the concern about the gap between theory, research and practice (Holter & Schwartz-Barcott, 1993). Considering the long history of describing and measuring the nutritional problems associated with hospitalisation, an action research project that aimed to address the issues within the real world of practice seemed timely. It has been said (Webb cited by Winter & Munn-Giddings, 2001) that action research has much to offer in analysing and solving problems so that action plans can be devised to improve standards of care. Thus, this methodological approach appears to be the most suitable approach for this study. However, it is important that any changes focus on the needs of patients if they are to have any impact on

mealtimes. This project is attempting to improve mealtime care by implementing patient-centred mealtimes, changing the focus from institutional convenience to one that focuses on the requirements of the patients themselves. In order for this change to take place education as well as a change in ward culture is required.

The project is divided in three phases.

Phase 1

Nolan & Grant (1993) state that the 'first stage in a quality action research study is to establish the basic values underpinning the care in a given area'. They suggest that staff look critically at taken-for-granted assumptions underpinning care because giving attention to strategies of change is of little use if the context of change is not clear. Thus, in this phase the existing mealtime care and environment were explored in order to uncover the everyday realities and context within which current practice occurs. In depth descriptive accounts of the environment, based on observations of mealtimes and perspectives of staff, patients and other visitors to the ward, were collected by holding focus groups with staff, interviews with patients and having a comments box on the unit for patients, staff and visitors to record comments and ideas.

Phase 2

The data from phase 1 were fed back to staff on the unit and used to form an action plan to develop a patient-centred approach to mealtimes in collaboration with the staff of the unit, with the focus of the work in this stage being on nursing practice at mealtimes and the mealtime environment.

Phase 3 (outcome measures)

This phase will involve evaluation of the project, by repeating the baseline data collection and comparing any differences between the sets of data. The process of change is also being documented through recording of field notes and reflective diaries. Focus groups with staff and interviews with patients will also be repeated, with the comments box in place throughout the period of study.

Findings from the focus groups held with staff on the unit as part of phase 1 and the methods being used for phase 2 of the study will be discussed, and examples of how action research is resulting in changes to the mealtime experiences of both staff and patients will be given.

Data collection

Action research enables the use of a range of methods of data collection to explore the issue under consideration, in this case the hospital mealtime. As only qualitative methods can contribute to an understanding of the social processes that impact on nutritional status (Dowler & Rushton, 1994), it was qualitative methods that were selected. The methods included focus groups, interviews, observation and benchmarking using the 'Essence of Care' benchmarking tool (Department of Health, 2001b).

Focus groups. Focus groups, i.e. group discussions that focus on a specific set of issues (Kreuger, 1994), can capture different perspectives and views about a specific experience or event (Kreuger, 1994), and group members are able to respond to and discuss each other's comments as well as 'tease out previously taken for granted assumptions' (Bloor *et al.* 2001).

Focus group discussions were held at the beginning of the project, before the action research intervention began, in order to identify difficulties with mealtimes and nutrition-related work on the unit and will be repeated at the end of the implementation phase. The focus groups included members of staff working on the unit, with representation from healthcare assistants, qualified nursing staff and occupational therapy and physiotherapy staff. Photographs representing mealtimes on the unit were shown to participants as a stimulus to promote discussion at the beginning of the focus group (Kitzinger & Barbour, 1999) and the questions used in the groups focused on various aspects of the mealtime experience. They were held in a quiet room on the unit during the nursing shift overlap, and were conducted by two researchers, with one researcher taking notes while the other researcher facilitated the discussion. Three focus groups involving nineteen staff were undertaken and were tape-recorded and transcribed.

Interviews with patients. Qualitative interviews are used when information of a more-detailed in-depth nature is sought (Kvale, 1996). They have a flexible structure based on a series of open-ended questions constructed to cover the subject being researched. The focus is on the individual's experiences, and the interviewee is therefore at the centre of this element of the inquiry (McCracken, 1988).

In the present project interviews were used to help to see the mealtime from the patients' perspective and to explore patients' experiences and views of the unit mealtimes. The interviews involved purposive sampling, which allows participants to be selected on the basis of personal judgement as to who would be best able to contribute to the discussion. They were undertaken with a sample of six patients and they were tape-recorded and transcribed verbatim. During the interviews older patients were encouraged to describe their own experiences.

Observation. Six mealtimes were observed. All three mealtime events were included in the observations, and each mealtime was observed by two individuals, enabling all the geographical areas of the unit (including both day rooms) to be included. Observations, which included the location of eating, involvement and activity of nursing staff and timing and duration of the events, were recorded onto an observational schedule designed for the project.

Data analysis

The analysis of the data was qualitative, utilising interpretative inductive approaches such that 'categories, themes, and patterns come from the data' (Janesick, 1998). This process involves immersion in the data, i.e. listening to interviews and focus groups and examining the observation schedules in order to gain a 'general sense' of the

data. The audiotapes were fully transcribed and during this process they were made anonymous. Line-by-line analysis was carried out independently by all the co-researchers through notation of the transcripts and cutting and sorting. Coding was then agreed through negotiation and discussion between the researchers and carried out using QSR N6 NUD*IST® software for qualitative analysis (QSR International Property Ltd, Doncaster, Victoria, Australia). The identification of themes and developing categories, the determination of connections and the refinement of categories was then carried out. Initially, categories described the data, but as analysis progressed the data were organised conceptually into three main themes.

Findings from phase 1

Findings from observation of mealtimes, focus groups with staff and interviews with patients have highlighted the factors that had an impact on the patients' experience of the mealtime event (see Fig. 1), which are: institutional and organisational constraints (e.g. timing of meals, food supply); mealtime care and nursing priorities (assessment, mealtime care, patient choice); eating environment (aesthetics, physical and social).

The latter two themes will be discussed, as they were the specific areas that staff chose to be the focus of the action aspect (implementation phase) of the research, but the first theme will feature briefly in order to indicate how it impacted on the patient experience.

Institutional and organisational constraints

This theme describes the constraints that the institution places on mealtimes at the ward level that were presented

as frustrating features of the mealtime by both staff and patients and were perceived to have a detrimental effect on mealtimes. These elements were considered by staff to be largely beyond their immediate control and include factors such as institutional routines and timing and lack of essential equipment that contribute to the lack of control staff feel about this aspect of mealtimes and to a feeling of pressure and stress during mealtimes. The pressures that the staff experience about mealtimes are subsequently passed onto patients, who feel unable to relax and enjoy the mealtime experience.

Mealtime care and nursing priorities

Data within this second theme describe the ward-level processes that impact on the care provided to patients at mealtimes. Within this theme the data fall into three categories: mealtime care and its organisation; patient choice; assessment and monitoring of the nutritional status and food intake of patients.

Mealtime care and organisation. It was felt that some staff are often involved in other tasks during the mealtime, and therefore not everyone is available to help with the care needed by patients at this time. Often this situation means that qualified nurses are involved with, for example, the administration of medicines, and administrative work such as making phone calls and paperwork.

Patient choice. Choice is central to much of current government policy, and in particular is a feature of patient-centred care as set out in the National Service Framework for Older People (Department of Health, 2001*a*). However, examples demonstrating a lack of involvement in decision-making and a failure to offer choice emerged from both patient interviews and staff focus groups, relating in
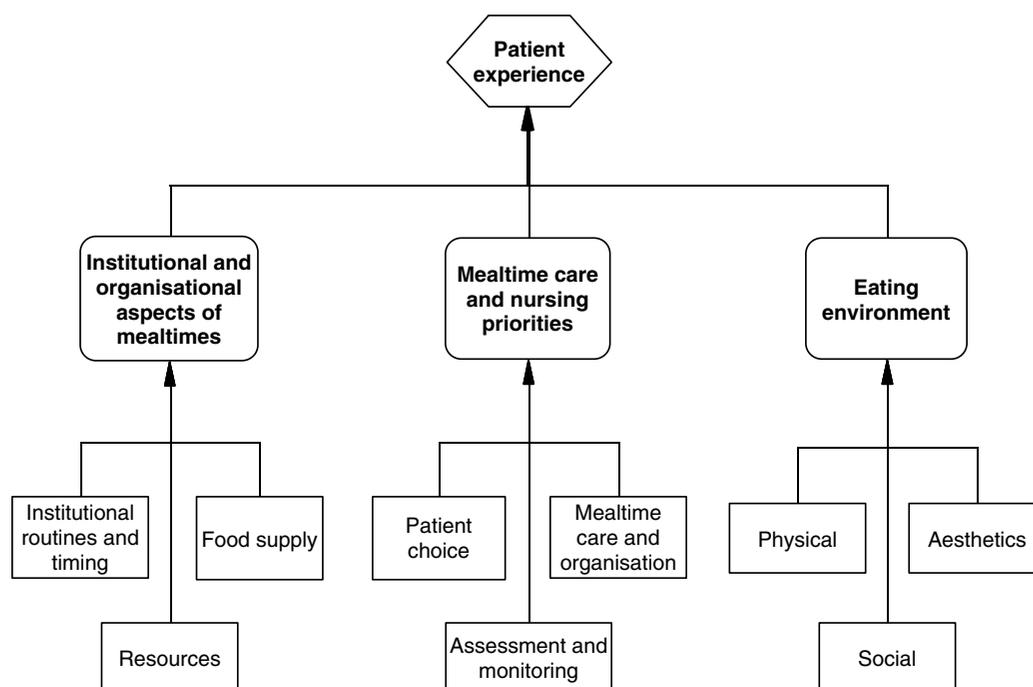

Fig. 1. Summary of the factors impacting on patients' experience of mealtimes.

particular to the wider context of the mealtime. Patients were generally happy with the food provided and the selection of food available.

Nutritional assessment. Although the importance of nutritional assessment of patients is obvious, this category highlights the current lack of systematic assessment on the unit. However, the use of this type of assessment tool was seen by nurses on the unit as a minimal requirement when assessing an older patient, needing to be part of a wider assessment that explores more qualitative aspects such as food likes and dislikes and preferred mealtime patterns, as well as the need for assistance with eating and eating difficulties. Nurses described the ongoing nature of assessment, as well as the importance of involving other team members and professionals in the process.

Patients expected the nurses to know about their likes and dislikes, which highlights the need for nurses to be alert to the needs of older patients who may not want to complain; a feature of other work with older patients.

Eating environment

This theme contains data that present staff and patient perceptions of the environment in which patients eat their meals. Patients tend to eat their meals either in one of the two day rooms on the unit or in the area of their bed.

Physical environment. As a result of the lack of storage space on the unit the day rooms are frequently used to store equipment such as special chairs and are also used as a television and sitting room. Consequently, the physical environment is fairly poor. One of the day rooms did not have a dining table, instead a plastic garden table was being used. A lack of suitable, and frequently basic, equipment was a notable feature of staff discussions.

Aesthetics. Given the poor physical environment, it was difficult for staff to focus very much on the aesthetic aspects of the mealtime. Presentation of food was thought by staff to be dependent on who was serving the food that day; some staff being perceived to be better at this task than others. However, patients found poor and rapid presentation of the food to be off-putting.

Social. Social aspects of the mealtime were considered to be poor by both the staff and patients. This situation was thought to be affected by the poor physical environment, but was also affected by lack of active facilitation by staff. Social aspects of the mealtimes seemed to occur only by chance. All the patients interviewed said that they would like the opportunity to share their mealtimes with staff from the unit. One patient had had this experience before on another unit and found it beneficial.

Feedback

The data collected in phase 1 were fed back to staff on the unit and used to determine the focus of the second phase, i.e. changing mealtime practice.

Phase 2: action research to change practice

Changing practice is a complex process that has been found to be difficult to achieve (Kitson *et al*. 1998).

However, it has been demonstrated that implementation is most likely to be successful when there is good evidence to support the change, the context is receptive to the planned change and the change is facilitated by both external and internal facilitators (Kitson *et al*. 1998), which was the case for the present project. Meyer *et al*. (2000) have outlined both the barriers and facilitators to change encountered by researchers using an action research approach. The process of practice development and the associated frameworks for putting the change into operation were thought to have much to offer in guiding the team in their attempts to change mealtime practice. These frameworks offer mechanisms that build on the facilitators to change and the strategies to help to overcome some of the barriers.

Practice development is defined as '... a continuous process of improvement towards increased effectiveness in patient centred care. This is brought about by helping healthcare teams to develop their knowledge and skills to transform the culture and context of care. It is enabled and supported by facilitators committed to systematic, rigorous continuous processes of emancipatory change that reflect the perspectives of service users' (Garbett & McCormack, 2002). It does not occur in neat linear ways because of the 'messy' reality of practice (McCormack *et al*. 1999). Thus, any approach to practice development has to account for this reality. One group of researchers (McCormack *et al*. 1999) has proposed a theoretical framework that builds on the work of Kitson *et al*. (1998). This framework, which aims to transform and sustain practice by addressing the following specific aspects within the organisational culture: patient-centred culture; learning culture; enabling culture, is being used in order to help the team to focus the implementation, thus making the best use of the resources.

Throughout this project it has become apparent that mealtime care is a visible expression of the underlying unit culture, i.e. 'the way things are done around here' (Manley, 2000). As such, in order to transform mealtime care it is necessary to change the ward culture, which presents major challenges (Rycroft-Malone, 2004).

The changes that were proposed are 'rooted' in the evidence from the academic literature and findings from the first stage of the research. Thus, the staff decided to focus their attention on the three areas of: nursing practice; mealtime environment; nutritional assessment. As change takes time to achieve (Haynes, 1992), the process can be speeded up by using a more flexible process (Titchen, 2000) in which small cycles of change may branch off to create new cycles, resulting in a tree-like structure. Smaller change cycles have included, for example, addressing the storage of furniture to help to clear the ward day room, and within the major themes may include, for example, addressing the noise within the mealtime environment.

The three aspects of unit culture chosen for change are being addressed by developing staff so that they gain the skills and confidence needed to sustain and build on the work further by using the following strategies: action learning; formal educational sessions for staff; providing opportunities for senior staff to 'facilitate learning' of team members. The nurse-led team is also supported by a steering group and external facilitation.

Action-learning groups

Action learning is one of the most powerful ways of linking organisational and individual development (Newton & Wilkinson, 1995). It also increases morale, and promotes a sense of ownership and belonging, as well as attitude change, which is thought to be one of the most difficult aspects of change to achieve (Bourner & Frost, 1996). Action learning focuses on dealing with problems or issues within the workplace. Staff on the unit bring an issue or problem to discuss at the action-learning group and are then given the opportunity to work through it, thus learning about, and increasing their confidence with, problem solving.

'Facilitators of learning'

Project team members (C.W. and L.A.) have been enabled to facilitate clinical learning among other members of the team (Binnie & Titchen, 1999) by: role modelling in practice; taking opportunities to enable team members to reflect on their practice; giving feedback on performance.

External facilitation

External facilitation using elements of 'critical companionship' has been proposed as a method of facilitating learning from practice through critical reflection and the interactions between the practitioner and the facilitator (Titchen, 2000). This role aims to develop both practitioners and the 'social systems that hinder improvements in practice' (Harvey *et al.* 2002) through: facilitation of learning; understanding change; enabling transformation of practice.

Outcomes from phase 2

This stage of the work is underway at present. The changes that have been made so far include changes to practice at mealtimes that prioritise mealtime care for all staff on the unit, such that nursing staff are actively involved, and have rescheduled other work, e.g. giving out medication to avoid mealtimes (as recommended by Littlewood *et al.* 1997). The 'Malnutrition Universal Screening Tool' (British Association for Parenteral and Enteral Nutrition Malnutrition Advisory Group, 2003) has been introduced in order to identify those patients at risk of undernutrition, and changes have been made to the physical environment to ensure an environment more conducive to mealtimes (as suggested by Mathey *et al.* 2001), including improving the ambience of the dining room by purchasing crockery and tablecloths etc.

Conclusions

The present paper has explored the contribution that a qualitative approach, in this case action research, can make to changing nursing practice at mealtimes in order to improve the mealtime care for patients.

Phase 1 of the project describes the staff and patient perceptions of the mealtimes on the unit. This phase has been an essential part of the project, as it has identified the issues and problems that needed to be addressed in order to begin the change process. It has demonstrated again that despite research highlighting the nutritional problems in the hospital setting, little has changed and the current mealtime care culture has an adverse effect on patients' experience of mealtimes.

Although the project is still within phase 2, it is encouraging to note that a number of changes have been made to both mealtime care and the mealtime environment. However, for action research to be effective there are a number of issues that need to be addressed, including: understanding the local context; staff education; involving all members of the team.

The work to date on this project demonstrates that action research is a method of inquiry that can help to integrate evidence into practice. The method also works as a vehicle to enable practitioners and researchers to collaborate in efforts to improve the real world of practice, including the clinical situation and outcome for patients.

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