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"I don't eat when I'm sick": Older people's food and mealtime experiences in hospital

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ABSTRACT

Background: Inadequate dietary intake is a common problem amongst older acute-care patients and has been identified as an independent risk factor for in-hospital mortality. This study aimed to explore whether food and mealtime experiences contribute to inadequate dietary intake in older people during hospitalisation.

Methods: This was a qualitative phenomenological study, data for which were collected using semi-structured interviews over a three-week period. During this time, 26 patients aged 65 years or more, admitted to medical and surgical wards in a tertiary acute-care hospital, were asked to participate if they were observed to eat less than half of the meal offered at lunch. Participants provided their perspectives on food and mealtimes in hospital. Responses were recorded as hand-written notes, which were agreed with the interviewee, and analysed thematically using the framework method.

Results: Twenty-five older people were interviewed across six wards. Two main themes, 'validating circumstances' and 'hospital systems', were identified. Each theme had several sub-themes. The sub-themes within validating circumstances included 'expectations in hospital', 'prioritising medical treatment', 'being inactive', and 'feeling down'. Those within 'hospital systems' were 'accommodating inconvenience', 'inflexible systems', and 'motivating encouragement'.

Conclusion: Inadequate dietary intake by older hospital patients is complex and influenced by a range of barriers. Multilevel and multidisciplinary interventions based on a shared understanding of food and nutrition as an important component of hospital care are essential to improve dietary intake and reduce the risk of adverse clinical outcomes. Improving awareness of the importance of food for recovery amongst hospitalised older people and healthcare staff is a priority.

1. Introduction

In 2010 an estimated 524 million people, or eight percent of the world's population, were aged 65 years or older [1]. By 2050 this number is projected to triple to 1.5 billion equating to 16% of the world's population [1]. Increased longevity has been synonymous with an increase in prevalence of chronic diseases and multi-morbidities, and has resulted in a rapidly increasing demand for health care services [2]. Reports indicate older adults currently occupy at least 40% of hospital beds [3–5] making them significant users of healthcare services.

Several multicentre studies have reported that malnutrition is prevalent in 23–60% of older patients admitted in acute care hospitals, with an estimated 40% at nutritional risk [6–10]. Malnutrition is associated with poor clinical outcomes including prolonged length of stay (LOS), frequent readmissions and increased risk of mortality [6,11,12]. Although the aetiology of malnutrition in older acute care patients is complex and multifactorial [13,14], inadequate dietary intake during hospitalisation and post-discharge can exacerbate malnutrition [6,15,16]. Despite published literature indicating that patients are generally satisfied with the overall quality of food provided in hospitals [17–19], inadequate food intake is frequently reported in the older hospital population [6,11,20–22]. Poor dietary intake during hospitalisation has been independently

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associated with increased morbidity [15,16], prolonged LOS [6,15], and increased risk of in-hospital mortality [11,16].

A large number of studies have evaluated barriers to food intake during hospitalisation through objective measures such as patient questionnaires [18,23,24] and review of patient characteristics from medical charts [22,25]. Some studies have explored views of healthcare staff on the reasons for poor food intake in older hospital patients [26,27]. Whilst these approaches are useful for obtaining insight into reasons for poor intake from healthcare staff and patients' perspectives, qualitative methodologies are likely to provide a deeper insight into the patient experience to help identify the reasons why older people may have a poor food intake in hospital [28]. Few qualitative studies have explored the patient perspective regarding food and mealtimes in hospital [17,29,30]. These studies focussed on patients' experiences with food access [17], nutritional issues [29], food sensory quality [30] and mealtime experiences [31] during hospitalisation. However, to the best of our knowledge, perspectives regarding reasons for poor food intake have not previously been sought from older people who eat poorly during hospitalisation. Therefore, the aim of the current study was to explore the food and mealtime experiences and perceptions of hospitalised older people with poor food intake during their admission.

2. Methods

2.1. Study design

A qualitative phenomenological study design was used in order to gain insight into the lived mealtime experiences and perspectives of older hospital patients. Semi-structured interviews using open-ended questions were undertaken with hospitalised older people, to understand their mealtime experiences and to explore the reasons for poor dietary intake during their hospital admission. Interviews were chosen as the most appropriate method to answer the research question, which was concerned with the experience and perceptions of food and mealtimes by individuals in hospital, and as the most practical method for data collection at the hospital bedside. Rigour in the design and reporting of the study is based on the RATS framework (Relevance of study question, Appropriateness of qualitative method, Transparency of procedures, Soundness of interpretive approach) [32].

2.2. Setting

This study was conducted in a 750-bed metropolitan tertiary teaching acute care hospital located in Brisbane, Australia.

2.3. Hospital food service

The hospital predominantly uses a cook-chill plated delivery system with some items prepared fresh (such as poached eggs, sandwiches and salads). Breakfast, lunch and dinner are served by foodservice staff commencing at 7 a.m., 11:45 a.m., and 5p.m. respectively. Patients on diet codes requiring specified mid-meals are delivered by nutrition assistants in the morning and afternoon and by foodservice staff for supper. Each morning patients order their dinner for that evening, along with breakfast and lunch for the following day. Depending on the ward, patients can either order their meals by making selections on a paper menu order form, or verbally with a nutrition assistant using an electronic menu ordering program. Patients admitted after the morning menu rounds receive default meals suitable to their diet code (e.g. default lunch and dinner meals for full diet are sandwiches and dessert, and hot meal and dessert respectively). Patients consume their meals in their rooms.

2.4. Participants

Participants were purposively sampled from 12 medical and surgical wards in the departments of orthopaedics, oncology, gastrointestinal, internal medicine, respiratory diseases, and urology. At the time of data collection, the hospital was in the process of piloting assisted and protected mealtimes in some wards. The wards selected for recruitment were not part of the pilot project and therefore considered suitable for the aim of the present research.

Inclusion criteria were: (1) age ≥65 years; (2) observed food intake of fifty per cent or less of food provided at a lunch meal; (3) LOS ≥2 days at the time of mealtime observation; and (4) provision of informed verbal consent. Participants with an LOS of ≥2 days were selected to ensure that they were receiving meals that they had self-selected. Demographic data including age, weight, and days since admission, were collected from participants' medical chart. Potential participants were identified by one researcher (KH, a final year nutrition and dietetics student). The researcher observed potential participants' lunchtime meal trays after the trays were collected by foodservice staff and assessed intake compared to what was ordered as indicated in the meal slip accompanying each food tray. Potential participants were then approached to participate in the interview if they met the inclusion criteria. People were excluded from the study if they (1) were diagnosed with a terminal or critical illness or disordered eating; (2) had cognitive impairment as recorded in the medical chart; (3) were admitted in an intensive care/high dependency unit, rehabilitation, long-stay or sub-acute wards; (4) were receiving clear/full fluid diets, only enteral/parental nutrition, texture modified diets and/or thickened fluids; or (5) were nil-by-mouth.

None of the researchers were directly involved with providing nutritional care to the hospital patients. One of the researchers (MF) was employed at the hospital at the time of data collection, in a non-clinical role. The researcher conducting the interviews did not offer any nutritional advice but instead referred participants to the ward dietitian (not involved in the study) for nutritional support if required.

2.5. Data collection

An initial interview guide was developed based on relevant literature [17,18,22,23,29,30]; and drawing on the clinical knowledge and experiences of three researchers (KH: student dietitian; EA, MF: Accredited Practising Dietitians). Several drafts were produced and discussed until the researchers were satisfied with the content and phrasing of the questions and prompts posed. The initial interview guide was used in three pilot interviews with patients who did not meet the criteria for inclusion in the study, resulting in minor changes to the wording of questions in order to elicit the most relevant responses from participants. After the first two interviews were conducted, it was noted that both participants had referred to the lack of concern about food intake by nursing staff, so an additional question was added to the final interview schedule (Appendix A).

Each interview lasted approximately 30 min and was completed at the participant's bedside. The researcher (KH) introduced herself as a research student, explained the study and obtained verbal consent from the participants. Questions were then posed using open ended language and, in line with the semi-structured nature of the interviews, varied in the actual phrasing and order of questions posed with each participant. Responses were recorded using hand written notes, rather than with an audio recording device, in an effort to overcome the practicalities of the ward environment