Improving the Nutritional Status of Dementia Patients

The introduction of a platter-style menu

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People living with dementia may experience various symptoms, such as taste and olfactory dysfunction, attention deficit, executive functions deficit, impaired decision-making ability, dyspraxia, agnosia, behavioural problems like disturbed eating behaviour, oropharyngeal dysphagia and refusal to eat.[1] The severity of these symptoms varies according to the stage of dementia. People with dementia often face difficulties in eating and drinking due to problems expressing hunger/thirst, a lack of interest in food caused by low mood, poor concentration, confusion in recognising food and remembering how to eat and use utensils, changes in food preferences, difficulties chewing and swallowing and paranoia surrounding food.[1-3]

Background

Interventions to support people with dementia include changing the colour of plates, altering the environment, and offering small-size meals.[2, 4] Finding the most effective way to encourage people with dementia to eat, drink, and maintain nutritional intake is important. Although many studies[3-6] have focused on factors such as environment and support during mealtime, few studies have focused on the effect of the type of food alone on the nutrition intake of people with dementia.[2] It has been demonstrated that changes in mealtime habits and atmosphere, based on the personal needs of inpatients, could increase nutritional intake and reduce the risk of malnutrition, especially among older people.[3, 4] Beck *et al.*[7, 8] reported that it is possible to improve nutrition in elderly nursing home residents by providing alternative supplements, such as chocolate and homemade oral supplements. Offering people with dementia family-style meals may result in modest increases in mealtime participation and communication of residents with dementia;[5] however, staff training in prompting and praising may be necessary to see large changes in these behaviours.[5, 6, 9] In the elderly with low body mass index (BMI), it has been found that food intake and meal satisfaction improved when food service changed from traditional trays to cafeteria-style portioned meals.[10] Individually portioned food offered to dementia patients stimulates a homelike atmosphere, thereby encouraging increased food consumption.[6] Providing feeding assistance during meal service by volunteers and grazing was also found to be a proven method to improve nutrition in hospital inpatients with dementia.[3, 4, 6, 8]

The Lewisham and Greenwich NHS Trust collaboration

People with dementia in the Lewisham and Greenwich NHS Trust are offered a range of menus to choose from for their lunch and supper, including the finger food menu. However, some of the patients were found to be struggling with their nutrition and food intake. Following dementia quality audits on ward 19 at the Queen Elizabeth Hospital, it was identified that alternative menus between lunch and supper, with appropriate choices for patients with a dementia diagnosis who are struggling with their nutrition, were not available. Therefore, a collaboration was established between the ISS Food Service Dietitian, the Lead Dementia Nurses and Dementia Specialist Nurses at University Hospital Lewisham and Queen Elizabeth Hospital to identify appropriate dishes, in a platter-style menu, to aid those patients struggling with their nutrition and food intake.

Initially, the platter was only introduced to patients with dementia, but throughout the trial it was extended to other patients who were struggling with their nutrition due to a medical condition and/or mental capacity.

Aims, objectives & standards

- Aims: Test the effect of providing an alternative menu to patients who are struggling with their nutrition on their meal satisfaction and food intake.
- Objectives: To provide a platter style menu which provides flexibility in putting a plate together where a selection of sandwiches, bites and desserts can be placed in a dish and put out for the patient, which could reflect positively on the meal satisfaction of the identified patients and their nutrition.
- Standards: Meal satisfaction will be measured by recording the patient's enthusiasm towards the platter by the nurses and the patient's family, which could be translated by numbers of platters ordered per patient.

Figure 1: Platter menu

Methodology

Patients who were struggling with their nutritional intake across all wards at the Queen Elizabeth Hospital, who could consume regular food (as defined by IDDSI Level 7 – https://iddsi.org/Framework), were offered a platter. The Dementia Specialist Nurses identified the patients with poor nutrition and included those who could have been referred to a dietitian and on oral nutrition support but had been either refusing to have their supplements or their main meals.

The platters orders were received through the 'Service Point' screens on the wards twenty-four hours in advance, then were sent in bulk to the wards the next day and left in the fridge to be removed later by the nursing staff between lunch and supper and served to the previously identified patients. The platters were prepared and organised by the nursing staff on bright, green-coloured round plates and were left on the table in front of the patients for an hour to graze on before they were collected by the nursing staff. The nursing staff presented the platters as a buffet and encouraged the patients to try the food items offered.

The Dementia Specialist Nurse collected anthropometric measurements and supplement plan from icare using Microsoft Word. Platter choices were collected from ISS system mri-Evolution. The trial run was nine weeks – starting 23 October 2023, ending 24 December 2023 – however, data up to February 2024 was analysed.

The platter was served cold and offered a choice of sandwiches, finger food bites and a selection of desserts and snacks. Each platter was served with a freshly cut salad and easy melt crips – see **Figure 1**. The platter provided an estimated energy of 554-938 kcal and 18-47 g protein per platter, and choices included higher energy, healthier eating, easy to chew, vegetarian, vegan, gluten-free and low potassium.

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Results

Twenty-two patients aged 81.6 ± 11.1 and BMI 21.1 ± 4.1 ordered 65 platters in the period between October 2023 and February 2024 across the Queen Elizabeth Hospital wards. **Table 1** details patient demographics. Among these patients, 45% of the patients reordered up to seven platters per patient during their stay, 32% of these patients were discharged, 5% were readmitted and 9% deceased.

Dementia Specialist Nurses and patients' families reordered the platter following improved food intake and meal satisfaction among the 22 patients who were given platter in this trial, 45% of them reported increased nutrition intake and meal satisfaction. The effect on patient weight was not recorded.

Limitations and challenges were noted when a patient's diet was changed by the speech and language therapists to IDSSI level 6 and below. Furthermore, some patients were not engaging with the platter food, but data was not documented. Meal satisfaction was observed by the nursing staff following presentation of the platters to patients, but plate waste data was not collected or recorded.

In summary

Following the positive effect of the platter-style menu on the nutritional intake of patients with dementia at the Queen Elizabeth Hospital, it was added as a permeant alternative menu for patients on dementia wards. This platter-style menu is aimed to be extended to other NHS sites and to be combined with lunch clubs on dementia wards to maximise the nutrition for patients with dementia.

The platter-style menus could be used as an alternative menu for patients struggling with their nutrition intake, including those who are diagnosed with dementia or a learning disability, and with patients who are elderly or with a mental health diagnosis, for example.

More collaboration from the nursing staff is required in documenting the anthropometric data of patients at the point of admission, and on weekly basis to mark the effects of the platter on malnourished patients.

Table 1: Patient demographics

Variable	Results
Gender	N=22
Female	77%
Males	23%
Age	81.6 ± 11.1
BMI	21.1 ± 4.1
Diagnosis	N=25
Dementia	20%
Vascular dementia	8%
Parkinson's disease	8%
Alzheimer's disease	4%
Mental health	12%
Substance misuse	4%
No memory dementia	4%
Undiagnosed dementia	4%
Unspecified	36%
Referral (n=22)	50%
Dietitian	27%
SALT	23%

Acknowledgements: The author would like to take this time to acknowledge fellow Project Leads at Lewisham and Greenwich Trust: Kate Hudson, Lead Dementia Nurse Specialist, Shannon Kelly, Dementia Nurse Specialist & Ginnie Adamson, Dementia Specialist Nurse, and the ISS Catering Staff at Queen Elizabeth Hospital.

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