Research

The role of dietitians in residential aged care: How do cooks and chefs perceive their contribution?

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Objective: This study aimed to explore how dietitians could work with cooks and chefs to contribute to best practice.

Methods: Data from interviews and focus groups comprising 38 chefs, cooks and food service managers were analysed. Inductive line by line coding of transcripts was conducted within a critical realist framework. Coding was completed independently by two authors before reaching consensus on themes.

Results: Four main themes emerged: (i) knowledge sharing; (ii) communication; (iii) collaboration; and (iv) accessibility. Participants praised dietitians' knowledge and expertise, but some raised concerns about inconsistency in the advice they received.

Conclusion: Dietitians working in residential aged care are ideally positioned to act as advocates for residents and food services. However, findings suggest that experiences of working with dietitians are mixed. Aged care menu guidelines and quality measures could assist, not only in promoting a consistent approach to dietetic advice, but also a system for benchmarking satisfaction and best practice.

Policy Impact: This study highlights that inconsistencies in practice and lack of funded time remain an issue for successful collaboration in some residential aged care food services. Widely endorsed practice guidelines could be used for benchmarking and improving service outcomes.

Practice Impact: This study highlights the relationship between dietitians and food service staff. Findings suggest that dietitians are ideally placed to advocate for nutrition and are well received by food service staff, however inconsistencies in practice and lack of funded time remain an issue for successful collaboration in some services.

Key words: dietitian, food services, homes for the aged, residential facilities.

Introduction

Australia's ageing population is increasing, and demand for residential aged care (RAC) places will increase. In 2012, there were 252,890 aged care places [1]: this is expected to increase to 1.7 million places by 2056 [2]. For 91% of the older adults living in RAC, this will be their home until their end of life [3]. It is widely accepted that meals in RAC are a key factor in residential satisfaction and nutritional outcomes. But institutional food services frequently receive criticism, particularly in association with a rising prevalence of malnutrition in aged care residents [4,5].

Malnutrition can have serious consequences for residents. It is linked to an increased risk of morbidity and mortality and can significantly reduce quality of life [6]. Inadequate food intake, due to food preferences, dissatisfaction with institutional diet, lack of appetite and poor dental health commonly contribute to malnutrition in aged care settings [6]. While dental and medical reasons for poor appetite can be managed with varying success, research has shown that improving meal quality and choice at mealtimes can have a significant effect in increasing food intake in older adults [6].

Residential aged care food services are encouraged to work with dietitians to review menus regularly. Dietetic advice in conjunction with feedback from residents aims to address accreditation standards for nutrition and hydration [7]. In an aged care setting, dietitians have the responsibility to provide expert nutrition and dietary advice [8]. In many cases, they provide this advice both at an individual and at an organisational level to meet accreditation criteria [7]. Chefs and cooks are responsible for preparing nutritious, high quality and visually appealing meals and snacks to meet nutritional requirements [9].

Collaboration between dietitians, chefs, cooks and other foodservice staff plays a significant role in optimising food intake and reducing the risk of developing malnutrition in older adults in aged care facilities. A number of studies support the importance of collaborative work and a multi-disciplinary approach. A holistic nutritional management of aged care residents [10,11] is a key message in the Maggie Beer Foundation (MBF) mission statement. The MBF has created a program entitled 'Creating an Appetite for Life', through which they hope to celebrate, empower and upskill cooks and chefs working in RAC. Flinders University Nutrition and Dietetics academic staff collaborated with the MBF to evaluate changes in knowledge, practice and leadership following the program.
To the researchers’ knowledge, there have been no studies exploring the experiences of cooks and chefs working with dietitians in RAC. Therefore, after the topic was raised during an evaluation project, MBF impact data were reanalysed to explore how working with dietitians is perceived by food service staff in RAC. The intention was to contribute to an understanding of how cooks and chefs perceive dietitians’ contributions to multidisciplinary practice [12,13].

Methods
This study used a general inductive approach to thematic analysis, triangulating coding from interview and focus group data within a critical realist framework [14]. This philosophical approach has gained popularity in social and health research as it is thought not only to help researchers understand events or experiences, but also to assist translation of findings through practical recommendations [15].

Inductive coding is a systematic approach guided by research objectives, but consistent with the approach of Strauss and Corbin, whereby the ‘the researcher begins with an area of study and allows the theory to emerge from the data’ [16]. The objective of this analysis was to explore the perceptions of collaborative working between chef or cook participants and dietitians they may have had contact with. The intention was not to use the inductive approach to find explanations or causes, but rather to develop a theory or commentary about the experiences of chefs and cooks working with dietitians [14].

A convenience sample of cooks and chef participants from the inaugural MBF education program in June 2015 and subsequent March 2016 program were invited to participate in data collection. This study was approved by Flinders University Social and Behavioural Research Ethics Committee (6929) and complies with the Helsinki Declaration of Ethical Conduct.

Cooks and chefs who had attended the 2015 ‘Creating an Appetite for Life’ education program were contacted via email after the event to seek permission to collect telephone interview data exploring perceptions of working with dietitians. Telephone interviews were conducted several weeks after the two day workshop, by a student (LS), who had no practical experience of working in an RAC. Participants were informed of this fact and that the student was seeking honest and confidential feedback.

The semi structured questions used in the telephone interviews were developed from the end of program evaluation focus groups of the inaugural 2015 program. Interviews asked open ended questions on the topic of ‘collaborative working with dietitians’, which had been raised by several participants as a barrier to good practice. Discussions were digitally recorded. Telephone interviews lasted approximately 15 30 minutes (but were not limited to this timing). Interviews were conducted until no new themes were generated and consensus between authors was that saturation had been reached. Participants were invited to review the transcripts for member checking, but no comments or changes were returned.

The subsequent 2016 ‘Creating an Appetite for Life’ education program provided an opportunity to collect more data. Focus groups were conducted to extend and qualify the data already collected. As this was a convenience sample and the program participants were all required to be employed in a RAC facility within the food service department as a cook, or a role that involved food preparation or food service, all were invited to participate in the focus groups. Written informed consent was received from all participants prior to each focus group, and an option to decline participation was offered.

A focus group approach was deemed the most pragmatic method for data collection. Focus groups were held immediately following the close of the two day education program. The focus groups were conducted by two academic staff with dietetic backgrounds, both of whom had knowledge of RAC and food service (OF and AY). In an effort to reduce bias, their profession was acknowledged prior to the interview or focus group taking place. Current evidence suggests focus groups are a valid qualitative research method. Focus groups offer more time for respondents to reflect on their responses and produce insights between participants. In addition, they are useful in qualifying information in a multimethod study design such as this [17]. The focus groups lasted 30 45 minutes (but were not limited to this timing), and facilitators used the same list of semi structured questions as had been used in the telephone interviews. Questions were designed to be broad and prompt discussion, and asked about the nature of participants’ working relationships with dietitians, ease of access to a dietitian and any positive or negative interactions they may have had. Discussion was again not limited to question topics, and dialogue was digitally recorded for verbatim transcription.

To improve interrater reliability, transcript data were read several times to identify topics using a constant comparative approach. Topic codes were identified a priori from the telephone interviews and the focus groups. Independent parallel coding was done by two authors (OF and LM) who then met to find consensus and check clarity of topics, before identifying major themes across all of the transcripts. Exemplar quotes were extracted for illustration of key themes. This general inductive approach limits the presentation of themes to those deemed most relevant to the objectives for inductive analysis and is often used because of its systematic and uncomplicated approach to deriving findings [14].
Results
From a potential pool of \( n = 59 \) participants from the 2015 and 2016 programs, data from cooks or chefs \((n = 38)\) were collected and analysed in this study. Nine individual interviews from the sample of participants who had attended the June 2015 program and focus group data from participants recruited from the 2016 ‘Creating an Appetite for Life’ program \((n = 29)\) were collected. Investigators did not persist in trying to contact the remaining participants from the 2015 cohort \((n = 21)\) as no new themes were generated after the nine interviews. The focus groups provided further confirmation of saturation in a different participant group. Overall, four key themes were identified: (i) knowledge sharing; (ii) communication; (iii) collaboration; and (iv) accessibility.

Table 1 describes demographic information for all participants for whom data were analysed. Of these participants, most were aged over 40 years \((n = 30, 79\%)\) and had completed a trade qualification before working in RAC food services \((n = 28, 74\%).\) The majority of participants identified themselves as a food service manager with a chef back ground \((n = 14, 42\%),\) head chef \((n = 6, 16\%),\) cook \((n = 5, 13\%),\) or operations manager with a chef back ground \((n = 5, 13\%).\)

Despite the education programs targeting cooks and chefs in Victoria \((n = 14, 42\%),\) and NSW \((n = 14, 42\%),\) and WA and Tasmania collectively \((n = 2, 6\%).\) In addition, a representative of a national RAC organisation also participated in the study.

Knowledge sharing
Our research revealed that food service staff looked to the dietitian to be knowledgeable and able to disseminate relevant information regarding the menu, or menu service in terms that were understood and practical:

I … not confusing me with the medical side and getting into all the nitty gritty, and it just really inspired me, and that’s why I have been really inspired to change the menu … (Interview)

Cooks and chefs who reported good relationships with the dietitian had received, in their opinion, ‘useful education’ (Interview). In contrast, participants who did not have these knowledge sharing opportunities with their dietitian said that they felt deprived of reliable nutrition information and wanted more education provided in house, particularly around special diets, for example allergy management or texture modified diets:

… Have more readily available information sheets on where gluten may be found … suitable puree foods … do you need to add liquid to smooth it out more, how smooth is smooth? (Interview)

However, the topic of clinical competency was also raised as an important aspect of knowledge sharing. By explanation, participants commented that it was not unusual to receive conflicting information from different dietitians. Examples including therapeutic diets and menu focus such as provision of a nourishing diet as standard versus diet aligned with the Australian dietary guidelines [18] were cited:

… we will get one dietitian that will say diabetics can have foods high in fat but no sugar and the next one will say they can have sugar but no fat. (Interview)

Having written information or timely visits seemed to be an important aspect of receiving knowledge, as did consistency in nutrition messages. All of these factors are connected to the subsequent theme of communication.

Communication
Participants discussed various ways in which they communicated with the dietitian. For some facilities, this comprised email only, dissemination of information via the head chef...
or food service manager and, in some cases, no communication at all. Positive and desirable experiences of communication included the following: (i) face to face conversations; (ii) regular open lines of communication; (iii) opportunities for communication that could be initiated from either side; and (iv) interactions that were practical and respectful:

... I wanted to ask no matter if I thought it was silly or not, she treated everything like it's important, and yes I have the time. (Interview)

Overall, verbal communication was the preferred way for cooks and chefs to collaborate with the dietitian. Negative experiences of working with a dietitian were associated with limited communication:

... If she puts forward a plan or something with changes I just find it hard that we can’t ask more questions regarding ... well her proposal really. (Interview)

Collaboration
Collaboration included comments around teamwork, respect and co-operation between the food service staff and the dietitian without feeling there was a power differential. Similar to the sentiments expressed around desirable communication with a dietitian, participants highlighted the importance of mutual respect and understanding from both parties:

they don’t think they’re a boss and they know that our expertise is one area and we know that hers is in another and we come together and we have mutual respect for one another. (Interview)

Lack of consultation with kitchen staff provoked a lack of respect for the dietitian and animosity towards the profession:

... she was basically just throwing things at us and we were not sure whether we could do it. (Focus group)

... they would ask us for input, but you would give it to them ... and they would just go off and think that their information would be a lot better. (Interview)

Successful relationships were described as those where the dietitians looked to the expertise of the kitchen staff to help guide menu design. Positive working relationships with a dietitian were associated with an approach where staff had the opportunity to understand the dietitian’s perspective, ask questions and provide input.

Accessibility
Accessibility defined by the chefs mostly referred to the employment status of the dietitian, whether they were full or part time staff employed by the organisation or sourced externally. Participants who had a good relationship with the dietitians were able to arrange regular meetings or had regular email or telephone contact.

However, participants more often raised the issue of dietitians being hard to access due to either cost, not knowing how to contact with them, or non overlapping working hours:

... they come in at 2 o’clock and the chef is finishing and there is no time. (Interview)

... I don’t have much contact with a dietitian, she will review the menu about every two years. (Focus group)

Staff in facilities with a dedicated dietitian, with time allocated for food service management, whether through an external company or ‘in house’, were generally happier with their access to dietary advice.

Finally, participants were asked what qualities they might attribute to a ‘good’ dietitian or dietician service. In response, comments echoed previously highlighted themes of good communication, rapport with food services, being mindful of what the kitchen can do and being accessible to discuss nutrition and best management of the facility residents.

Discussion
The provision, quality and satisfaction of food in RAC is a team effort between cooks and chefs and dietitians. The relationship between the cook or chef and the dietitian will have an impact on the degree of collaboration between the two parties and how satisfactorily they address their common goal [19]. Few studies have evaluated the working relationship between chefs and dietitians, or tools to measure the satisfaction of key food service staff with their dietician or dietetic service [20]. In a setting heavily critiqued for contributing to the significant rates of malnutrition, it is more important than ever that the collaboration between dietitians and other food service staff works successfully.

Findings suggest collaboration and communication were two key factors that affected the relationship between a chef and a dietitian. A systematic review by Zwarenstein and Reeves [21] highlighted the importance of a professional relationship based on interprofessional education, as well as collaboration and communication. Food service professionals want two way communication with a dietitian, and to feel they have an opportunity to ask questions and discuss proposed nutrition pathways, rather than just implement them. In addition, participants who were in regular contact with their dietitian were able to receive extra guidance and resources, making the chefs more confident in managing menus for residents requiring diets for nutrition support, allergies and texture modification.
Conversely, those with no regular contact with the dietitian lacked confidence in providing food for residents who required special diets. These sentiments were also associated with the theme of accessibility; as food service staff in several facilities reported, access to a dietitian was infrequent. Communication was by email only, or visits were brief or unsatisfactory, with no opportunity for learning or follow up. Some participants explained this lack of access as a result of the high cost of dietetic input, whereas others blamed a lack of dedicated dietetic services.

Finally, participants nominated knowledge sharing as having a positive impact on their working relationship with a dietitian. Knowledge sharing extended beyond collaboration and communication, to sharing technical competency. Participants in both interviews and focus groups stated they looked to dietitians to have specialised knowledge about nutrition. Overall, the participants acknowledged and respected dietitians’ expertise in the area of nutrition and health. However, several participants raised concerns about dietitians providing contradictory recommendations, for example inconsistent advice on management of diabetes. This result is consistent with findings from a study investigating diabetes management in RAC which reported inconsistency in promoting current recommendations [22].

A strength of this study was that it included data from two different cohorts. Material elicited during telephone interviews quickly identified key topics, and data saturation was further qualified by no new topics emerging from the focus groups. Four prominent themes were subsequently agreed by consensus between the researchers [14,16,23]. This sampling methodology could have resulted in bias, since like minded facilities were likely to participate in the program. However, the participants were from a diverse number of facilities private and public, large and small and representatives from most states in Australia contributed. Inductive analysis and efforts to maintain inter-rater reliability were intended to minimise potential for author bias. Finally, triangulation of the data from interviews and focus groups suggests that the responses were similar regardless of the interviewer’s profession and training, and the same themes were generated from both methods of data collection.

Conclusion

Overall, this study offers an insight into chefs’ and cooks’ perceptions of how well dietitians contribute to best practice in nutrition in RAC. Further research in this area seems warranted, such as exploring ways to evaluate the working relationship between dietitians and other food service staff. Ideally, such research should include dietitians as participants. Dietitians should also work towards creating an Australia wide policy on nutrition in aged care. Development of service benchmarking is an important step in improving food service staff experiences and dietetic collaboration, and improving nutrition outcomes for older adults in RAC.

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