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THE CAPACITY OF FOOD SERVICE PROVIDERS AS NUTRITION CHANGE AGENTS IN NURSING HOMES

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Abstract: *Background:* Despite the correlation between the food provided and nursing home residents' food satisfaction, Quality of Life and health, the capacity of food service providers to enact positive nutrition-related changes is unknown. *Objectives:* Researchers explored (1) the experiences and perceptions of senior-level food service providers from nursing homes (NH) to elicit change prompted by participation in a national educational intervention (2) the barriers and enablers to eliciting change and (3) practice implications. *Design:* Using qualitative methodology, individual semi-structured interviews were conducted four months after the intervention and thematically analyzed. *Participants:* Participants were 23 senior-level food service providers from 21 NH in Victoria, Australia. *Results:* Participants started with the necessary confidence, knowledge and skills for food provision and three themes that best represent food service providers' perceived capacity and experience to affect food service changes included: (1) participants' motivations as change agents (2) empowerment facilitated by external factors (organizational, external and ongoing peer-support) and (3) constraints to enacting change (local and system-wide). *Conclusion:* Understanding the motivations and experiences of senior food service providers to enact change provides important information on the barriers and enablers which can be used to augment intervention planning and reduce the implementation gap between evidence-based recommendations and practice. A number of underlying mechanisms were identified and recommendations for system-wide changes made. Improvement in food and dining experiences may help to improve residents' satisfaction with food which has been correlated with improved life satisfaction, health and well-being.

Key words: Aging, food services, long-term care, nursing homes, quality of life.

Introduction

Population ageing is a significant concern for many countries (1, 2). Life expectancy, low fertility rates and changing demographics have resulted in an unprecedented increase in people aged 65 years and over in the last five decades (2, 3). Those aged 85 years and older are increasing at the fastest rate and expected to more than triple between 2015-2050 (2, 3). The United States, Japan, Australia and Europe will continue to have one of the longest life expectancies in the world and the ageing population is expected to present challenges to the welfare and health system (2). An increasing number of older people are assessed as not being able to continue to reside independently in their own home and move into supported accommodation in long-term care facilities (4), termed Nursing Homes (NH).

Nutrition is vital for maintaining the health and well-being of residents in NH (1, 5, 6). Ageing alters nutritional requirements (1) and Protein-Energy Malnutrition, Vitamin D deficiency, Vitamin B deficiency and other micronutrients are challenges for residents in nursing homes (1). Crucial to residents' quality of life (QOL) is also the enjoyment of food (7-11). Satisfaction with food is associated with increased mental well-being, social improvement and life satisfaction among older people (7-10) and is of particular relevance to residents (8, 11, 12).

Central to the provision of residents' nutrition is the role and responsibilities of food service providers (13). Residents are dependent upon the provision of their food from their carers, particularly food service staff. Where once many residents would have decided what and when they would eat, and what was 'good' for them, in NH these decisions are made predominately by food service staff (8, 11). 'Good food' is important to residents and has been defined as food which is familiar, 'home-style', cooked with fresh ingredients and easily recognizable on the plate (11). 'Good food' symbolizes comfort for residents and as such is an important QOL indicator (11). Residents' experience or perception of 'good food' in NH, however, is not always positive (11-13) and is an ongoing issue in NH (12).

Residents' perceptions (11, 12, 14, 15) and NH carers' experiences (6, 10, 14) have been explored, but despite the pivotal role of key food service staff their perspective remains unknown. It is recommended that more successful interventions incorporate the views of the user to mitigate the implementation science gap translating best practice knowledge into day-to-day positive behaviours (16). An understanding from foodservice providers' perspective would provide insights into the barriers and enablers experienced and the motivations to enact change. This would identify underlying mechanisms which may lead to positive behaviour changes, help inform the feasibility of food service staff initiated change and address a limited understanding of how interventions in NH work (17). This in turn may inform program-planners, policy makers and NH management with what would be needed to improve residents' food satisfaction and QOL.

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In response to the link between 'good food', life satisfaction and the nutritional needs of the population, a not-for-profit Foundation (Foundation) has delivered an education program with industry and nutrition experts for food service providers to transform the food experience of residents in NH (21). Novel to this program (also referred to as an intervention) is it is celebrity-led by a philanthropic cook and aims to empower key NH chefs and cooks from across the nation to become change agents in their local facilities.

The purpose of this study was to address an evidence gap by: (1) exploring the experiences and perceptions of senior-level foodservice providers to elicit change in their facility following participation in an intervention developed to empower senior NH food service staff, (2) identifying barriers and enablers to enacting change and (3) identifying practice implications.

Method

Study Design and Setting

The intervention was a 14-hour interactive, discussion-based and predominately experiential program described elsewhere for senior level foodservice providers in NH. The program is underpinned by Social Cognitive Theory and adult learning theories which assumes participants' start confident, are self-directed learners, learn best through doing and problem-solving and learning is enhanced by drawing on a repertoire of experiences and used immediately, Unique to this program is that it is celebrity-led with expert support with a focus on increasing the capacity of NH foodservice providers to be change agents.

Qualitative research was used as it lends itself to understanding the lived experience of those translating the gains from the educational intervention into real-life changes (19). The focus was on senior-level food service providers who had the mandate to enact change. Researchers undertook phone interviews using semi-structured questions four months after participants had attended a 14 hour educational program over three days in June 2015. Interviews were conducted four months later after a time considered long enough by participants to elicit change. Approval for the study was granted by the Social and Behavioral Research Ethics Committee at Flinders University South Australia.

Participant recruitment

Participants were recruited from the program which was promoted through aged care networks and restricted to facilities in Victoria, Australia (n=387). Facilities paid for flights and accommodation over the three days but the program itself is offered at no cost. At the program, participants were given a plain English summary of the study, had an opportunity to ask questions of the researchers and then provided signed consent.

All but one of the authors of this qualitative study have a wide range of experience working with older people in residential long-term care, community-based settings, food services and health services research. Prior to this study, the authors were unknown to the participants or their facilities.

Data collection

Semi-structured questions were asked using an interview schedule developed from the literature and trialed with potential users for usability. Topics related to food service providers' perception of what changes they had made, what was their experience of making these changes, barriers and enablers and what additional support could assist. Questions were semi-structured to allow participants to relate their experience as they have perceived it and to allow themes in the analysis to emerge. All interviews were recorded and transcribed verbatim. All participants were interviewed. This was more than necessary for data saturation but this allowed for insights across a variety of facilities geographically and in size and purpose.

Data analysis

Transcribed data were analyzed using inductive thematic analysis where common themes were identified using a six-step process (19). The lead author (LM) and one other (JH) familiarized themselves with the data by listening to the recordings, reading the transcripts and taking notes. The transcripts were coded manually, line-by-line. Coding was carried out independently and the results discussed for common codes and quotations. Following coding, the quotations were sorted into groups to reflect the emerging themes. Different themes and sub-sets of themes were further identified during the write up of the analysis. Consensus was achieved in each of these steps. Trustworthiness of data was ensured through members checking what was reported against their experience. Quotes representative of the findings were selected for each theme and sub-theme for reporting purposes.

Results

Twenty-three senior-level foodservice providers from 21 NH participated in the phone interviews which were undertaken four months after the program and lasted between 16-55 minutes. Seven of the 30 program participants were not interviewed because two had left the position, two were on extended leave and three could not be contacted. Of the 23 participants interviewed, the majority had a senior food service role or managed the food services and there was a mixture of organisations from metropolitan areas, regional country towns and rural sites. Foodservice type and the number of places per facility also varied, reflecting the diversity in NH. Selected characteristics of the participants and facilities are listed in Table 1.

When sharing their experience three main themes emerged: (1) participants' motivations as change agents (2) empowerment facilitated by organizational, external and ongoing peer-support and (3) constraints to enacting change. Within these main themes were a number of inter-related

sub-themes which could also be described as enablers or constraints.

Table 1
Selected characteristics of Nursing Homes in Victoria, Australia (n=21) and senior-level food service providers (n=23) interviewed for their experience and perception of enacting food service changes

Characteristics	n	% of total participants
Males	12	52%
Females	11	48%
Job Title		
Food Services /Catering/Chef Manager	14	61%
Service Support Manager	2	8%
Head Chef	6	27%
Chef	1	4%
Faculty size (number of places)		
30 or less	1	5%
40-60	6	28%
61-80	2	10%
81-125	3	14%
200-220	3	14%
Multiple sites (50-100 places per site)	6	29%
Faculty type		
Not-for-profit	9	43%
Private	14	57%
Faculty location		
Multiple sites (4-8 sites each)	7	33%
Metropolitan	5	24%
Regional town or rural	9	43%
Food service type		
Fresh-cooked on site	15	71%
Cook-chill	1	5%
Fresh-cooked on site + cook-chill	5	24%

Participants' Motivations as Change Agents

All of the participants described changes to food service practices four months post-program including; food provided through menus and recipes, the dining environment and interactions with other staff, management involvement and residents' satisfaction. Some participants described the experience as transformational and their responses indicated a high degree of conviction to make changes over the long term.

I said I will be continuing to lobby for more funds, more staff.... Yea for me, even my second chef said to me she really likes the new motivated me (Head Chef IP-3)

Participant's motivations for acting as change agents varied and included wanting to make a difference, empathy for the residents and/or upholding standards.

I think that the food needs to be more important.... it needs to be pushed more and be more in the public eye and it needs to, you know, we just need to do better. (Head Chef IP-3)

Participants' were empathetic towards residents and recognized that food was a significant source of pleasure, had meaning to residents, was a conduit for socializing and contributed to residents' health as well as quality of life.

We have people here who .... the family don't even come and visit. Which I think is incredibly sad and I sort of think food, for a lot of us, is a fairly major part so why can't we make it the best that we can make it. Why can't we serve restaurant quality meals? Instead of just 'ah well, it is only old people'. (Head Chef IP-3)

For some participants, making a difference was very personal with participants reflecting on their grandparents, parents, other family or friends as residents in NH. Of equal value for many participants was the motivation to provide food of an exemplar standard.

We are building four aged care facilities so it is really crucial for me to get the right mould to go forward because I really want to set a good standard and drive the innovation into the future. (Food Service Manager IP-5)

For many participants, residents' feedback motivated them to continue with their change agenda following the program

You know when I have residents come and knock on the door and tell me what a lovely meal it was today and things like that it makes it all worthwhile. ... (Head Chef IP-3)

Four months later all of the participants were still inspired to make changes to further improve recipes, menus, the dining environment and dining experience and collaborative, working relationships.

I want to have the reputation that people say 'wow' we want to go there when we get old because we hear the food is so good (Head Chef IP-3)

Empowerment Facilitated By External Influences

Organizational support

A number of common factors were attributed to building participants' capacity to effect change. Management support was common to all participants and unconditional to a few participants following participation in the program.

Anything I've wanted to try I've been able to purchase …. anything. They've went out and bought one of those fancy whippers and….All these new little contraptions that we've seen there, they've went and bought all of it. (Catering Manager IP-2)

Some participants described how they involved key management personnel such as the Chief Executive and Board members in food service decision-making by attending meetings with management, inviting management to eat with residents, and sharing meals with management for feedback.

The majority of the participants reported that many or most of the kitchen staff was supportive of change and gave

examples of how they had empowered staff and endeared their support through collaboration. However the capacity of kitchen staff to enact their intentions was problematic for some.

External support

Participants reported high levels of confidence in their skills even before the program. Rather than improving skills, participants identified that the benefit of the celebrity status of facilitators, supported by experts, was for motivation and as influential advocates for change.

I think she is a really good person to drive this kind of thing. It needs somebody of her stature, her media profile and stuff like this to raise awareness with what is going on and what is achievable and what's not and this sort of thing in the aged care. (Head Chef IP-3)

Ongoing peer- support

All of the participants elaborated on how ongoing peer-support during and after the program facilitated their motivation to progress change. Active participation in a closed, social media group mediated by the Foundation was reported as facilitating and sustaining motivation and change. Participants shared photos of recipes, problems, solutions and advice. Some participants extended this support by making their facility available for visits and helping each other with events. Others were less active but monitored the posts regularly.

I get on there every night to see if somebody has cooked something different or if somebody has other comments. (Head Chef IP-9)

The comradely, willingness to support each other and common ambitions and concerns, unified the participants as a community.

It's ongoing and you feel important because you're still part of it (Chef Manager IP-23)

Constraints to Enacting Change

Local-level structural constraints

Caveats such as costs, time constraints and food regulations were factors expressed by most participants as barriers to enacting change. Ingredients for the NH recipes were identified as costly and difficult to access, particularly as they were unavailable on the procurement lists negotiated for the state of Victoria and therefore not cost-competitive. Compounding this difficulty was the limited budget for meals per resident per day.

..... the one nagging little thought in the back of my mind was that, yeah this is wonderful and we would love to do it but where is the money to do it …. the first moment they get the final results back they have been told "ooooh oooooh" this is costing us money so you better scale it back. (Manager Chef, IP-4)

Some participants attributed the restrictive budget to prioritizing costs rather than residents' satisfaction. Providing higher quality foods, more foods familiar to residents, more freshly sourced foods and foods to meet modified texture needs or specific nutritional needs of residents would incur additional costs beyond the set budget.

.. So you have got people making decisions based on the dollar rather then what is right for the kitchen, well what is the right care. So this is where it has to change, the focus has to be on the care and food not the dollar; it should be secondary but not primary. (Food Service Manager IP-5)

Moreover, more than half of the participants identified that they needed more time sanctioned from management to rework recipes and redevelop menus. Support from NH management to develop new recipes, have the time to implement menu changes and change food service practices were identified as crucial to enabling participants. Also, a source of frustration was that some kitchen staff was resistant to change. Participants perceived this as; some staff not caring, some not seeing the relevance of changing, some entrenched in their ways and some not skilled or constrained by time and other workload demands.

..when I first started in aged care, you know it was just sort of nobody really cared. [The chef] had been here nearly 20 years and he was doing things the same way the day he left as the day he started and he couldn't see an issue with that. . (Head Chef IP-3)

System-wide constraints

Working within the national food regulations for aged care facilities were identified as a constraint by a few participants. Including more food variety and fresh ingredients was perceived as problematic given current food regulations which participants interpreted as increasing food contamination risk. Regulations also constrained some due to an uncertainty that they weren't complying and favoured food wastage due to a rigid interpretation of the food safety regulations.

What is right? Not just someone saying they are taking the hardest line just to cover themselves (Food Services manager IP-5).

Some participants attributed different regulations between states, a lack of products on state-wide procurement lists and different interpretations of the food regulations by auditors and food service providers as barriers to enacting menu changes.

Participants elaborated that the time demands of providing meals were exacerbated by significant reforms within the aged care sector as facilities expanded to accommodate the ageing population. Some participants also reflected concerns for finding time to develop menus for the next generation of 'baby boomers' with different food preferences and the pressure of implementing consumer-directed care where people will have more control and choice over the services provided.

We are introducing this household module more so the nurses will be doing more, so that's putting a lot of stress on everyone. ... That's where I am finding it hard. That's where you get burnt out you know. (Support Services Manager IP-8)

A few others perceived aged care reform as disempowering foodservice further where the priority is given to nursing care,

Table 2
Barriers and enablers identified by senior food service providers (n=23) from Nursing Homes (n=21) in Victoria, Australia, four months after attending an education intervention

Enablers		
Intrinsic motivations	Management support for food service practice changes, resourcing and budget	Ongoing peer-support with colleagues in other facilities
Self-efficacy	Kitchen staff motivated and skilled	Advocacy and perceived influential standing from celebrity-cook and experts leading education intervention
Personal growth and adaptation		
Barriers		
Minimal networking with senior-level peers	Structural constraints such as budget, workload demands, time-poor	Disempowered group without a 'voice' to advocate for changes
Not considered part of the care team but as peripheral support	Kitchen staff lack skills to make changes	Aged Care Reform creating extra work demands within a contracting food service budget
	Staff resistance to change due to entrenched attitudes and work practices, lack of perceived relevance	Absence of national benchmarks and standards for food and nutrition and supporting system structures
	Inconsistent and/or rigid interpretation of national food regulations constraining changes to the menu	

Barriers and enablers categorized according to three levels of influence as described in socio-ecological model for health behavior changes29

cost-savings are sought from foodservices and food services are not considered part of the care team despite the importance of food to residents.

In contrast, aged care reform was also identified as an opportunity including possibly changing the role of food services from a support service to part of the care team

But we have people in business background now coming in, in charge of aged care facilities, this is a really positive change because they actually .... think of aged care facilities as hotels, with super services being a very important part, food being a very important part... (Manager Chef, IP-4)

Key enablers and constraints shared by the participants are summarised in Table 2.

Discussion

Efforts to change or strengthen practices in NH food services must carefully consider food service providers' motivations and perceived barriers and enablers. Empathy for residents, wanting to make a difference to people's QOL and achieving high standards of service were all expressed as motivations in this study, which is absent in the literature. Within their facilities, senior foodservice providers appear to have the agency to make changes with management's support and an inspired and skilled food service staff. Local level factors such as meal costs, scheduled time and staff engagement were identified by participants as enablers or constraints. Quantitative studies have also acknowledged costs, time and staff resistance as significant barriers to enacting change in NH food services (20, 21).

In this study, celebrities supported by experts acted as the catalyst for change. Rather than increasing participants' skills, their contribution was to increase participants' self-efficacy to become change agents and their perceived influential standing with management and beyond. Celebrity chefs are recognized to enable changes in food services (22) and the popularity of celebrity chefs in food programming is well known to the public (23, 24). Also crucial was that the intervention acted as a conduit for isolated senior-level chefs to work together as a community. Learning as a community of practice is a well-known pedagogical approach (25) however it needs to be guided. Peer support is also well known as an enabler for supporting change (26) although there is a scarcity of this in the literature for NH.

While enablers such as external peer-support, organizational support and increased self-efficacy empowered chefs to enact local-level changes, barriers beyond the influence of individuals presented significant constraints. These included benchmarks for meal costs, restrictive state-wide procurement lists, subjective local food regulations and a lack of national NH food standards, all of which require system changes.

Difficulties sourcing affordable ingredients flagged the need for changes to the state's procurement processes whereby many facilities are limited to purchasing products on this competitively-priced list. Likewise, discussions at the system level were called for regarding food regulations. The safety of residents and protection from food contamination is paramount

but some food service staff struggle with interpreting and using the regulations (12) and widening the scope for the use of more 'home-style' recipes made from fresh ingredients.

Similarly, a significant constraint was the lack of a minimum budget benchmark for meals per resident per day. Local benchmarks covered the minimum requirement for three meals per day plus mid-meals but were a barrier to introducing more variety, more choice, more acceptable modified textured meals and more fresh ingredients. These qualities have been correlated with residents' satisfaction (11, 12, 27) which in turn influences QOL and nutritional status (6, 9, 17). Research is required to demonstrate whether meals which meet the nutritional needs of residents while satisfying other needs for 'good food' can be achieved at only a small cost increase or cost neutral with savings created from improved health outcomes.

National standards for food services in NH would justify minimum benchmarks for costing meals plus minimum requirements for nutritious meals recognized as 'good food' (11) that also contributed to residents' QOL and enjoyment (8, 9). Australia does not have national food service standards for NH although most of the states and territories have developed voluntary standards for publically-funded facilities.

The issue of cost raised questions about the role of food services in NH. Some participants stated that the care of residents rather than the budget should drive decisions about food services. The low prioritization of food services in Australia is an issue in other studies (12, 20) and its perceived relegation to hotel services or support services means that outcomes are based upon meeting budgetary projections and volume of meals rather than being part of holistic care. Participants recognized that the food provided had a direct impact on residents' satisfaction and QOL. Moreover, food service staff that interacted with residents noted that they were a channel for residents' concerns and part of residents' social lives. This phenomenon where commensality and social-interactions in NH influences residents' QOL is well known (8, 10, 14). Some participants elaborated further that food services should be considered part of the care team rather than an adjunct support service. Participants' motivation was predominately to improve the QOL of residents through food, and elevating food service management to be part of the care team would empower what is a traditionally disempowered group (20). Due to their celebrity-status and wider influence, and in the absence of a peak body for NH food services, participants believed that entities such as the Foundation have the potential to initiate discussions for system changes to support the transformation of aged care food services.

Practice Implications and Study limitations

While studies have explored the perceptions and experiences of residents and of care staff with NH food provision, this study focused on food service providers and is the first to the authors' knowledge. These results highlight the importance of including food service providers' frontline experiences with enacting change and using this information on identified gaps, barriers and enablers to augment intervention planning. Food service staff providing 'good food 'which is consistent with national regulations face unique challenges (28). Enablers included being empowered by the attention of celebrity-led advocates, attending an educational program, ongoing peer support across NH and organizational support. Study findings are consistent with a socio-ecological perspective that presumes that human behaviour is a result of the interaction of environmental factors and individual characteristics (29). At the individual level foodservice providers would benefit from ongoing peer support as a community of practice, participation in a program that builds capacity to enact change rather than build foodservice knowledge and skills and stronger collaboration with upper management. At the wider levels of influence, system-wide changes would benefit such as; national standards for NH food services, national benchmarking for costing meals, an expansion of the definition of nutritious, appropriate foods to include 'good food' and a revisit of national NH national food regulations and state-wide procurement lists as to how they are interpreted and enacted. From this study, reconsidering food services as part of the care team also appears warranted as aged care expands and more is known about the interface between residents' QOL and food service providers.

Despite the range of NH types, sizes and geographical location there was commonality in what interviewees shared and saturation with no new themes or information from the analysis. However, a limitation of this study is that while qualitative research provides rich in-depth data, it cannot be generalized and the participants were likely to have been early adopters and not representative of all NH. Given the universal importance of nutritious food provision in nursing homes and the central role of food service providers for residents' food satisfaction and QOL, this warrants more research for generalisability.

Conclusion

Incorporating strategies that address the barriers and incorporate the enablers identified by senior food service providers are critical for successful interventions and change in NH. Within their facilities, food service providers have the agency to make changes with management's support and a motivated food service staff. External enablers such as ongoing peer-support and attention from celebrity-status experts increase the self-efficacy of food service providers and empower them to enact the changes they are very motivated to do. The education part of the intervention and skill development is not central. Other factors, however, are beyond individual's agency and require a systems approach. National benchmarks and standards for food regulation, meal-costing and 'good food', complemented with a change in role from support to care would enable this disempowered group.

This study has relevance to program developers but also to policymakers interested in enacting national regulations and system changes which ensure residents' enjoyment of food, QOL and health.

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References

1. John BK, Bullock M, Brenner L, McGaw C, Scolapio JS: Nutrition in the elderly. Frequently asked questions. The American Journal of Gastroenterology 2013, 108(8):1252-1266.
2. He Wan GD KP: An Aging World: 2015 International Population Reports P95/09-1. In. In. Washington DC: U.S. Census Bureau,; 2016.
3. Aged Care [http://www.aihw.gov.au/aged-care/]. Accessed 31 December 2017
4. Australia's Welfare 2015 Growing Older 6.3 Older Australians and the use of aged care [http://www.aihw.gov.au/australias-welfare/2015/growing-older/#t4]. Accessed 31 January 2017
5. Bernstein M, Munoz N: Position of the Academy of Nutrition and Dietetics: food and nutrition for older adults: promoting health and wellness. Journal of the Academy of Nutrition and Dietetics 2012, 112(8):1255-1277.
6. Iuliano S, Olden A, Woods J: Meeting the nutritional needs of elderly residents in aged-care: Are we doing enough? The Journal of Nutrition, Health & Aging 2013, 17(6):503-508.
7. Chao SY, Dwyer JT, Houser RF, Jacques P, Tennstedt S: Experts Stress Both Wellness and Amenity Aspects of Food and Nutrition Services in Assisted Living Facilities for Older Adults. Journal of the American Dietetic Association 2008, 108(10):1654-1661.
8. Hoffmann AT: Quality of life, food choice and meal patterns–field report of a practitioner. Annals of Nutrition and Metabolism 2008, 52(Suppl. 1):20-24.
9. Jeong JS, Suee: Importance of satisfaction with food for older adults' quality of life. British Food Journal 2014, Vol.116(8):1276-1290.
10. Palacios-Ceña D, Losa-Iglesias ME, Cachón-Pérez JM, Gómez-Pérez D, Gómez-Calero C, Fernández-de-las-Peñas C: Is the mealtime experience in nursing homes understood? A qualitative study. Geriatrics & Gerontology International 2013, 13(2):482-489.
11. Crogan NL, Evans B, Severtsen B, Shultz JA: Improving nursing home food service: uncovering the meaning of food through residents' stories. Journal of Gerontological Nursing 2004, 30(2):29-36.
12. Bernoth MA, Dietsch E, Davies C: 'Two dead frankfurts and a blob of sauce': The serendipity of receiving nutrition and hydration in Australian residential aged care. Collegian 2014, 21(3):171-177.
13. Ruigrok J, Sheridan L: Life enrichment programme; eanced dining experience, a pilot project. International Journal of Health Care Quality Assurance 2006, 19(5):420-429.
14. Vesnaver E, Keller HH: Social Influences and Eating Behavior in Later Life: A Review. Journal of nutrition in gerontology and geriatrics 2011, 30(1):2-23.
15. Evans BC, Crogan NL, Shultz JA: Quality dining in the nursing home: the residents' perspectives. Journal of Nutrition for the Elderly 2003, 22(3):1-17.
16. Nilsen P: Making sense of implementation theories, models and frameworks. Implementation Science. 2015;10(53).
17. Keller H, Beck AM, Namasivayam A: Improving Food and Fluid Intake for Older Adults Living in Long-Term Care: A Research Agenda. Journal of the American Medical Directors Association 2015, 16(2):93-100.
18. Maggie Beer Foundation Creating An Appetite for Life Strategic Plan [http://dwjr2ufw81t0n.cloudfront.net/201701/2867 7a225c0a88413e88e4ff8daf8ce20af78fec/mbf%20strategic%20plan%20oct%202016.pdf]. Accessed 31 December 2017
19. Braun V, Clarke V: Using thematic analysis in psychology. Qualitative Research in Psychology 2006, 3(2):77-101.
20. Walton K: Improving opportunities for food service and dietetics practice in hospitals and residential aged care facilities. Nutrition & Dietetics 2012, 69(3):222-225.
21. Merrell J, Philpin S, Warring J, Hobby D, Gregory V: Addressing the nutritional needs of older people in residential care homes. Health & social care in the community 2012, 20(2):208-215.
22. Flego A, Herbert J, Gibbs L, Swinburn B, Keating C, Waters E, Moodie M: Methods for the evaluation of the Jamie Oliver Ministry of Food program, Australia. BMC public health 2013, 13:411.
23. Abbots E-J: The Intimacies of Industry. Food, Culture & Society 2015, 18(2):223-243.
24. Phillipov M: Mastering obesity: MasterChef Australia and the resistance to public health nutrition. Media, Culture & Society 2013, 35(4):506-515.
25. Taylor DCM, Hamdy H: Adult learning theories: Implications for learning and teaching in medical education: AMEE Guide No. 83. Medical Teacher. 2013;35(11):e1561-e72.
26. Sokol R, Fisher E: Peer Support for the Hardly Reached: A Systematic Review. American Journal of Public Health 2016, 106(7):e1-e8.
27. Chisholm A, Jensen J, Field P: Eating environment in the aged-care residential setting in New Zealand: Promoters and barriers to achieving optimum nutrition. Observations of the foodservice, menu and meals. Nutrition & Dietetics 2011, 68(2):161-166.
28. Deptment of Health and Human Services: Medicare and Medicaid Programs Reform of Requirements for Long-Term Care Facilities,. In: 68688 Federal Register Vol 81, No 192 Tuesday, October 4, 2016 Rules and Regulations
29. Sallis J Fisher E Owen N: Ecological Models of Health Behaviour In: Health behavior and health education: theory, research, and practice. Editors: Glanz K, Rimer BK, Viswanath K. 4th edition; 2008: 465-485