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Research

An exploration of individuals' preferences for nutrition care from Australian primary care health professionals

Lauren Ball[A,C], *Ben Desbrow*[A] *and Michael Leveritt*[B]

[A]School of Public Health, Griffith University, Parklands Drive Gold Coast Campus, Southport, Qld 4222, Australia.
[B]School of Human Movement Studies, University of Queensland, Brisbane, Qld 4072, Australia.
[C]Corresponding author. Email: l.ball@griffith.edu.au

Abstract. This qualitative study explored individuals' preferences regarding the provision of nutrition care from Australian health professionals and the factors influencing their preferences. Thirty-eight individuals aged 53 ± 8 years, living with a lifestyle-related chronic disease or risk factor for lifestyle-related chronic disease, participated in a semi-structured telephone interview. Participants were asked questions regarding their perceptions of which Australian health professionals provide nutrition care, their preferences for this care and the factors influencing their preferences. Interviews were transcribed verbatim and analysed thematically using a constant-comparison approach. General practitioners were the most recognised health professional that provided nutrition care to patients, followed by dietitians. General practitioners were regarded by most participants as the preferred provider of nutrition care because they were perceived to provide trustworthy and personalised nutrition care. Participants reported confusion regarding the professional differences between dietitians and nutritionists, and appealed for more information to be available to individuals that are considering consulting an Australian health professional for nutrition care. The findings of this study suggest that general practitioners are the preferred providers of nutrition care for many individuals living with a lifestyle-related chronic disease. Considering the increasing presentation of patients with lifestyle-related chronic disease in general practice, it is anticipated that the demand on general practitioners to provide nutrition care to patients will increase in the future.

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Introduction

Chronic disease is a leading cause of worldwide death and disability (World Health Organization 2011). Within Australia, the prevalence of chronic disease is increasing and is expected to contribute to over three-quarters of deaths in 2020 (Australian Government Department of Health and Ageing and National Health Priority Action Council 2006). Nutrition is a major modifiable determinant of many lifestyle-related chronic diseases. including type 2 diabetes, hyperlipidaemia and hypertension, as well as co-morbidities such as overweight and obesity (Australian Institute of Health and Welfare 2009). Improvements in the nutrition behaviour of individuals have been shown to improve risk factors and health outcomes associated with lifestyle-related chronic disease (World Health Organization 2003). Subsequently, nutrition is a key component of both prevention and management strategies for lifestyle-related chronic disease (National Public Health Partnership 2001; World Health Organization 2003).

Nutrition care refers to the provision of nutrition-related advice and counselling by a health professional, and is conducted in an attempt to improve the nutrition behaviour of patients (Ball *et al.* 2012). In Australia, the provision of nutrition care is not restricted to a singular health profession. Many health professionals such as general practitioners (GPs) (Royal Australian College of General Practitioners 2004), nurses (Australian Nursing and Midwifery Council 2006), dietitians (Dietitians Association of Australia 2009), nutritionists (Dietitians Association of Australia 2012*a*), exercise physiologists (Exercise and Sports Science Australia and Dietitians Association of Australia 2012) and naturopaths (Australian Naturopathic Practitioners Association 2012) have aspects of nutrition care stated in their competency frameworks. The manner in which these health professionals provide nutrition care has not been well researched, but is anticipated to differ in many ways, including: the delivery, content and duration of the nutrition care; the cost of the service; the reliance on evidence-based guidelines; and the perceived effectiveness of the nutrition care. In addition, these differences are likely to be influenced by the characteristics, nutrition-related qualifications and beliefs of the health professional (Ashby *et al.* 2012).

From a health services perspective, the capacity for health professionals to provide nutrition care is variable. For example, over 24 000 GPs currently practice in Australia, and ~83% of Australians consult a GP at least once each year (Britt *et al.* 2012). GPs provide nutrition care in ~7% of consultations, which equates to over 7.9 million consultations each year (Britt *et al.* 2012). As a comparison, Accredited Practising Dietitians are considered to be 'specialists' in providing nutrition care (Dietitians Association of

What is known about the topic?

- Health care consumers have been shown to drive the utilisation and demand on health care services. However, their perceptions regarding the health professionals that provide nutrition care in Australia have not been investigated.

What does this paper add?

- This study suggests that the demand on general practitioners to provide nutrition care is likely to increase in the future because many health care consumers prefer to receive nutrition care from general practitioners compared with other health professionals.

Australia 2012*b*), but have a considerably lower capacity of ~630 000 consultations each year (Mitchell *et al*. 2009). Based on capacity, it is likely that GPs have the largest potential influence on the health of Australians compared with other health professionals that provide nutrition care.

Health professionals hold diverse perceptions regarding their role in providing nutrition care to patients with lifestyle-related chronic disease (Ashby *et al.* 2012; Ball *et al.* 2013*a*). There is evidence that GPs can be effective at improving the nutrition behaviour and associated health outcomes of patients with lifestyle-related chronic disease (Ball *et al.* 2013*b*). However, GPs and other health professionals report concerns regarding GPs' competence to provide nutrition care, and generally other health professionals promote their own profession as the optimal source of nutrition care for patients with lifestyle-related chronic disease (Ball *et al.* 2013*a*).

Patients have been described as 'consumers' of health care (Hall and Schneider 2008), and their perceptions have been shown to drive the utilisation and subsequent demand on health care services (Connelly *et al.* 1989). Patients' perceptions of health care are receiving increased attention (Stewart 2001), and are a focus of the current Australian healthcare reform (National Health and Hospitals Reform Commission 2009). Patients consider multiple factors when selecting a health professional or health service, including the convenience, trust and accessibility of the professional or service, and recommendations provided by family and friends (Schwartz *et al.* 2005; Wun *et al.* 2010). Interestingly, patients generally do not consider the effectiveness of a service or the reliance on evidence-based health care practices when selecting a health professional or health service (Bornstein *et al.* 2000; Carman *et al.* 2010).

Patients' perceptions regarding the health professionals that provide nutrition care in Australia have not been investigated. It is important to investigate patients' perceptions of the health professionals that provide nutrition care in Australia because these perceptions have implications for the planning of future primary health services in Australia. Therefore, the aim of the present study was to explore individuals' preferences regarding the provision of nutrition care from Australian health professionals and the factors influencing this decision. The study further explored individuals' perceptions regarding nutrition care provided by a GP and the likelihood they would consult a GP for this care.

Methods

A semi-structured qualitative interview design was employed, utilising open-ended questions to guide discussions. Interview questions were informed by a review of published literature using an inquiry logic that reflected the investigative aims of the study. Table 1 outlines each question, including the logic for generating the information from participants. The study protocol was reviewed and approved by the Griffith University Human Research Ethics Committee (protocol number PBH/06/12/HREC).

Potential participants were male and female individuals aged ≥40 years, with at least one self-reported lifestyle-related chronic disease, or at least one self-reported modifiable risk factor for lifestyle-related chronic disease. These eligibility criteria, including age restriction, were applied to increase the likelihood of participants having previous interactions with health professionals, and being identified as candidates for nutrition care. The lifestyle-related chronic diseases were hypertension, hyperlipidaemia and type 2 diabetes, and the risk factors for lifestyle-related chronic disease were overweight or obesity, poor nutrition behaviour and sedentary lifestyle. Participants were asked if they had previously been diagnosed with one of the listed lifestyle-related chronic diseases, or perceived themselves to currently have at least one of the listed risk factors for lifestyle-related chronic disease.

Convenience and snowball sampling were utilised to recruit participants. Information about the study was included in a community newspaper, a university e-research newsletter and the university Facebook site. Interested participants were asked to contact the research team to receive further information, provide informed consent and arrange an individual interview. Interviews were conducted via telephone at a time convenient to the participant. After each interview, participants were asked whether they knew of anyone else that may be eligible and interested in volunteering for the study. Data collection and analysis were conducted simultaneously, and data collection continued until saturation of themes occurred. This refers to the point in time when additional interviews did not produce new information or perceptions from participants (Bowling 2009; Fade and Swift 2011). Each interview was conducted by one investigator (LB) using the questions listed in Table 1. The investigator's background was not discussed in the interviews. Prompting was used to explore themes as they arose within the interviews (Minichiello *et al.* 2008). Interviews were recorded with participants' permission, and transcribed by one investigator (LB).

Data analysis was conducted using a constant-comparative approach to thematic analysis, including open and axial coding (Thorne 2000; Strauss and Corbin 2007). First, one investigator (LB) manually coded sections of the transcripts and organised these into categories with common themes. Second, these themes were entered into a Microsoft Excel spreadsheet in order to link themes according to their properties and dimensions (Strauss and Corbin 2007). Where appropriate, frequencies of participants' responses were calculated, such as the number of participants that

Table 1. Semi-structured interview questions and inquiry logic
GP, general practitioner

Interview questions	Inquiry logic
May I please confirm your age?	Confirm eligibility for participation in study
Do you have any of the following conditions?	
High blood pressure	
High cholesterol	
Type 2 diabetes	
Do you describe yourself as[A]:	
Being above your most ideal weight	
Needing to improve your diet	
Needing to exercise more	
Please describe any previous advice you have received about healthy eating[B] from a health professional	Identify experiences important to the development of perceptions regarding nutrition care provided by GPs
Please name the different types of health professionals that regularly provide healthy eating[B] advice	Investigate the participant's' familiarity of health professionals that provide nutrition care
Which of these health professionals is most appropriate to your needs and why?	Explore the preferences for accessing nutrition care from different health professionals
How would you decide which health professional to consult for advice on healthy eating[B]?	Understand determinants of selecting a health professional to consult for nutrition care
What are your thoughts about going to a GP for advice on healthy eating[B]?	Explore the perceived appropriateness of GPs as a source of nutrition care
Are there any situations where you would decide to visit a GP for advice on healthy eating[B] rather than another health professional?	Understand enablers to utilising GPs as a source of nutrition care instead of other health professionals
Are there any situations where you would decide to visit another health professional rather than a GP for advice on healthy eating[B]?	Understand enablers to utilising other health professionals as a source of nutrition care instead of GPs
What are some advantages to receiving advice on healthy eating[B] from a GP rather than other health professionals?	Investigate the perceived advantages
What are some disadvantages to receiving advice on healthy eating[B] from a GP rather than other health professionals?	Understand barriers to utilising GPs as a source of nutrition information
Do you have anything else to add?	Provide participant with an opportunity to provide further information

[A]Participants that reported to have one of the listed lifestyle-related chronic diseases were not asked the questions relating to risk factors for these conditions because they were already deemed as eligible for study inclusion.
[B]After initial piloting of the interview questions, the term 'healthy eating advice' was included in the interview questions instead of the term 'nutrition care'. This was done to promote clear understanding of questions to participants.

were aware of Australian health professionals that provide nutrition care. Post-analysis discussion and verification of themes were conducted between two investigators (LB and ML) to identify common or dissident viewpoints amongst interviewed participants.

Transcripts were arranged into groups reflecting the interview questions for presentation as results. Original transcripts were edited grammatically and example quotes have been included to support key and/or contradicting themes identified.

Results

A total of 39 individuals contacted the research team between April and May 2012 and offered to participate in the study. One individual did not meet the inclusion criteria for the study and did not participate. The remaining 38 individuals participated in the study and their demographic characteristics are displayed in Table 2. The average age of participants was 53 ± 8 years and most ($n = 29$) were female. Eighteen participants had previously been diagnosed with at least one lifestyle-related chronic disease (hyperlipidaemia $n = 10$; hypertension $n = 8$; type 2 diabetes $n = 2$). Twenty participants reported to have at least one modifiable risk factor for lifestyle-related chronic disease (being overweight or obese $n = 13$; having a poor diet $n = 14$; being physically inactive $n = 13$). A summary of themes identified from participant interviews are displayed in Table 3.

Fifteen participants had previously received nutrition care from a GP. In most circumstances, the nutrition care was provided in the context of lifestyle-related chronic disease management.

> *My GP detected high blood sugar in me and then checked my diet*. (Participant 21)

> *When I have my high blood pressure checked he* [GP] *talks to me about nutrition.* (Participant 14)

> *When the cholesterol alarm was raised*, *she* [GP] *did talk to me about changing my eating habits.* (Participant 25)

Other interactions with health professionals for nutrition care were often with dietitians ($n = 6$), nutritionists ($n = 6$) or naturopaths ($n = 7$). Twelve participants had never received nutrition care from a health professional before.

Awareness of health professionals that provide nutrition care

When participants were asked to name the different health professionals that provide nutrition care, nearly all ($n = 33$) participants named GPs as a provider of nutrition care. Many participants also named dietitians ($n = 28$) and nutritionists ($n = 23$), and some named naturopaths ($n = 10$). Other health professionals that were less frequently named included nurses ($n = 6$), pharmacists ($n = 6$) and personal trainers ($n = 5$).

Table 2. Demographic characteristics of participants

Participant	Demographics		Eligibility	
	Age (years)	Sex	Previous diagnosis of lifestyle-related chronic disease[A]	Presence of one or more modifiable risk factors for chronic disease[B]
1	55	Male	✓	
2	62	Female		✓
3	57	Female		✓
4	67	Male	✓	
5	40	Male		✓
6	52	Female		✓
7	59	Female		✓
8	61	Male	✓	
9	62	Female	✓	
10	59	Male	✓	
11	40	Female		✓
12	69	Female	✓	
13	54	Female	✓	
14	55	Female	✓	
15	63	Male		✓
16	79	Female	✓	
17	48	Female		✓
18	45	Female		✓
19	54	Female		✓
20	49	Female		✓
21	42	Male	✓	
22	56	Female	✓	
23	62	Female	✓	
24	50	Female		✓
25	52	Female	✓	
26	54	Female		✓
27	44	Female		✓
28	49	Male		✓
29	54	Female		✓
30	53	Female	✓	
31	52	Female		✓
32	54	Female		✓
33	55	Male		✓
34	57	Female	✓	
35	42	Female	✓	
36	61	Female	✓	
37	55	Female	✓	
38	44	Female		✓

[A]Lifestyle-related chronic diseases included hypertension, hyperlipidaemia and type 2 diabetes.
[B]Risk factors for lifestyle-related chronic disease included being overweight or obese, poor nutrition behaviour and having a sedentary lifestyle.

Table 3. Summary of themes from participant interviews
GP, general practitioner

Area of inquiry	Summary of themes
Experience of receiving nutrition care	• Many participants had previously received nutrition care from an Australian health professional
Awareness of Australian health professionals that provide nutrition care	• GPs were the most recognised providers of nutrition care, followed by dietitians, then nutritionists
Preferred providers of nutrition care	• GPs were regarded as preferred providers of nutrition care, followed by dietitians • GPs were considered to provide personalised and professional nutrition care • Dietitians were considered as having a strong knowledge base of nutrition
Advantages and disadvantages of receiving nutrition care from a GP	• GPs were considered to provide personalised and professional nutrition care • Many participants were concerned about the amount of nutrition training and subsequent nutrition knowledge of GPs
Participants' desire for more information	• Participants were confused about the professional difference between dietitians and a nutritionists • Participants requested further information to be available for patients considering nutrition care

Occasional comments referred to dietitians as health professionals that 'punish' individuals through restrictive eating, and also use negative counselling styles.

> *From hearing what different people have said about dietitians, I don't think that would be any good for me. They can be a little bit, not down to earth enough.* (Participant 12)

> *The word dietitian sounds like diet, and I wouldn't want that.* (Participant 23)

Preferred providers of nutrition care

Most participants ($n = 21$) regarded GPs to be their preferred provider of nutrition care, followed by dietitians ($n = 12$). Two main reasons were provided to justify GPs as a preferred provider of nutrition care. First, GPs were regarded as providing the most trustworthy and personalised nutrition care because they had the most detailed understanding of participants' medical conditions. Second, GPs were regarded as the first contact point for all health care needs, and participants relied on GPs to provide nutrition care if required.

> *I trust my doctor's advice more than anyone else. They* [GPs] *know more about you in your entirety, so can suggest stuff that is actually manageable for you. A nutrition specialist doesn't have any relationship with you and they might suggest things that wouldn't work.* (Participant 18)

> *Going to the doctor is the first stop for many people, and a GP is far more qualified and have had a lot more training on physiology and the human body than other health professionals.* (Participant 21)

> *I think a doctor is the best person to go to. If you need further care to eat better then they* [the GP] *will give you tips and strategies.* (Participant 26)

In contrast, the participants that regarded dietitians as the preferred provider of nutrition care provided different reasons. Dietitians were perceived as having a strong knowledge base of food due to training in the field.

> *Dietitians are the experts in food, and I think they're the experts in what we should be eating and what we shouldn't be eating and what to do about a healthy diet.* (Participant 14)

> *I would go to a dietitian because food and dietetics is their specialty area. They've been trained.* (Participant 8)

Participants stated that they would rather receive nutrition care from a GP than other health professionals when the care was in relation to a personal health problem or medical condition. It was commonly stated that the nutrition care provided in these situations would be relevant and personalised because it was related to the participant's health.

> *If I was having issues with high cholesterol and diabetes and weight issues then my GP would be my first port of call for nutrition.* (Participant 20)

> *If I was very overweight and there were other health problems. . .I would go and see my GP and ask for steps to take to get better, including nutrition.* (Participant 27)

> *Lately with this high cholesterol, my doctor mentioned it* [nutrition] *to me and she should be the one to tell me to watch my diet.* (Participant 36)

However, participants stated that they would rather receive nutrition care from a health professional that is not a GP, such as a dietitian, nutritionist or naturopath if they had a particular question or topic they wanted to discuss.

> *If I had a specific thing in mind, like I wanted specific advice about something, then I could go to a specialist rather than a GP.* (Participant 5)

> *If I had a question about food and nutrition and wanted to learn more then I might go to a dietitian that works in the area.* (Participant 20)

Advantages and disadvantages of receiving nutrition care from a GP

Several advantages were reported regarding the nutrition care provided by GPs. Participants reported GPs to be professional, friendly and familiar with patients' medical history. As a result, participants perceived GPs as providing personalised care because they are able to take a patients' medical history into consideration when providing nutrition care. Other benefits such as availability and affordability of GPs were noted as well.

> *They* [GPs] *are professional, and can give you advice not just on healthy eating, but how you are physically. They take into consideration other factors that are important as well.* (Participant 5)

> *They've* [GPs] *got an overall view of the person, especially if it is a regular patient. . .so they've got all of those things at their fingertips, so that's a good way to help with your nutrition.* (Participant 16)

Some disadvantages were reported regarding the nutrition care provided by GPs. Although participants held GPs in high regard, concerns about the amount of nutrition training and subsequent nutrition knowledge were apparent. Some participants ($n = 6$) also perceived that nutrition was not a high priority for GPs and therefore GPs may not want to provide nutrition care to patients.

> *I don't think they have the knowledge or can be up to date because they're not a specialist in one area.* (Participant 13)

> *They know a little bit about a lot, rather than knowing a lot about a little. But a little bit of talk on nutrition may be all that someone remembers, and all that is needed to make a difference in their lifestyle.* (Participant 33)

Desire for more information

A sense of confusion was noted regarding participants' perceptions of dietitians and nutritionists. Many participants ($n = 14$) regarded themselves as not understanding the professional difference between a dietitian and a nutritionist.

I was probably thinking a nutritionist, but I'm not sure, and now I'm confused. I'm not sure if they have more training than a dietitian, one of them has more training than the other, but I'm not sure. (Participant 18)

I would go to a nutritionist I imagine rather than a dietitian. I don't actually know really what a dietitian does. (Participant 21)

Throughout the interviews, it became obviously that participants want more information to be available on the topic of health professional roles in Australia.

We generally don't know about the other professional services, and who can offer advice about healthy eating and that. I want to know about that. (Participant 3)

Participants clearly regarded GPs to be a trustworthy source of information regarding appropriate health professionals, and relied on GPs to suggest consulting other health professionals if needed.

If you asked me for $100 to tell you the name of the best health professional [to provide nutrition care] *I wouldn't be able to do it. I'm sure they exist but they must be pretty obscure because I wouldn't have a clue how to find one. I just ask my doctor.* (Participant 33)

I would ask my doctor who I should speak to. Of course there is always the Internet. . .but you really don't know what you're getting, so my first preference would definitely be a doctor. (Participant 9)

Discussion

The aim of the current study was to explore which health professional Australians would prefer to consult for nutrition care as well as the factors influencing this decision. This is the first Australian study to investigate individuals' perceptions of the different health professionals that may provide nutrition care for chronic disease management. The findings of this study suggest that many patients with, or at risk of, lifestyle-related chronic disease prefer to receive nutrition care from GPs rather than other health professionals, such as dietitians, nutritionists and naturopaths. Furthermore, patients want more information regarding the professional differences between Australian health professionals that provide nutrition care, and are particularly confused about the difference between a dietitian and a nutritionist.

GPs were perceived by participants to be trustworthy providers of nutrition care because they consider patients' medical history in their care. It is likely that participants perceive GPs to have a more detailed understanding of patients' medical history because of a strong sense of familiarity and participants may have had an existing relationship with a GP. The Australian primary care system positions GPs to be the first contact point for patients seeking health care in Australia (Royal Australian College of General Practitioners 2012), and many patients consult the same GP over time (Mainous *et al.* 2001). However, other health professionals such as dietitians and exercise physiologists also examine patients' medical history as part of routine practice (Lacey and Pritchett 2003; Exercise and Sports Science Australia and Dietitians Association of Australia 2012). Therefore, the familiarity with GPs appears to be a major determinant of participants' preference to receive nutrition care from GPs. This familiarity is likely to be driven by the accessibility and low cost of consulting a GP, which is a characteristic of the Australian primary care system.

In line with this, the awareness of the Australian health professionals that provide nutrition care appears to be limited. Overwhelmingly, the participants in the present study appealed for more information to be available on the topic of health professional roles in Australia. Increasing the awareness of health professionals that provide nutrition care may increase the likelihood that individuals consult these health professionals for nutrition care. Internationally, decision aids in the form of pamphlets or videos have been used to help individuals understand the options, potential benefits and harms for receiving different options of health care (O'Connor *et al.* 2009). Decision aids have been shown to improve individuals' knowledge of different options for health care and make informed decisions regarding their own care (O'Connor *et al.* 2009). Developing a decision aid regarding the range of Australian health professionals that provide nutrition care may assist individuals to understand the roles of different health professionals and make informed decisions about their own nutrition care needs.

It is anticipated that the effectiveness of nutrition care provided by different Australian health professionals is variable due to differences in the manner in which these health professionals provide nutrition care, and reliance on evidence-based practice. Evidence suggests that dietitians and GP are both capable of providing effective nutrition care for individuals with lifestyle-related chronic disease (Pastors *et al.* 2002; Ball *et al.* 2013*b*). However, many different forms of nutrition care can potentially be effective. Limited research exists on other health professionals that provide nutrition care in Australia, including naturopaths, nurses and exercise physiologists. Subsequently, further investigation into the differences in nutrition care provision of Australian health professionals is required to determine the capability of these health professionals to improve the nutrition behaviour and subsequent risk factors for lifestyle-related chronic disease.

The participants in the present study were concerned about the level of nutrition education GPs had received, but regarded them as having superior knowledge of medical conditions and therefore perceived GPs as preferred providers of nutrition care. Interestingly, Australian GPs have also reported concerns regarding the amount of nutrition education received during their training (Ball *et al.* 2010, 2013*a*). However, the findings in the current study suggest that patients perceive nutrition care to be 'non-specialised' and therefore ideally provided by their GP. In addition, the perceived benefits to receiving nutrition care from GPs, such as personal and professional care, may outweigh patients' concerns of inadequate nutrition education. Therefore, factors such as trustworthiness, familiarity and professionalism are likely to be important determinants for patients' nutrition care preferences. However, further research is needed to determine if the preferences of patients are associated with optimal health outcomes.

Australia is currently in the process of implementing a health care reform that focuses on the importance of providing patient-

centred care (National Health and Hospitals Reform Commission 2009; Australian Government Department of Health and Ageing 2010). The utilisation and subsequent demand on health services are influenced by patients' perceptions of their health care options (Connelly *et al.* 1989). Therefore, the results of the present study suggest that many individuals with lifestyle-related chronic disease are likely to consult GP for nutrition care in preference to other Australian health professionals. The implications of these preferences are important. Approximately 7% of Australian general practice consultations include nutrition care (Britt *et al.* 2012). Considering the increasing presentation of patients with lifestyle-related chronic disease in general practice (Australian Institute of Health and Welfare 2007), it is anticipated that the demand on GPs to provide nutrition care to patients will increase in the future.

The current study has two noteworthy limitations. First, participants were recruited through convenience and snowball sampling, and nearly one-third of participants had not previously received nutrition care from a health professional. Despite this, selection bias was possible, whereby individuals with a higher interest in nutrition or health professionals may have volunteered for the study, and their perceptions may not be reflective of the general Australian population. Second, the participants in this study were residents of South-east Queensland, and their perceptions of health professionals may have been influenced by the health services available in the geographic area, which may not be reflective of other areas of Australia, such as rural and remote communities. Further research is required to determine whether factors such as geographic location of individuals influence their preferences and subsequent use of health professionals who provide nutrition care.

The findings of the present study suggest that GPs are the preferred provider of nutrition care for many individuals living with lifestyle-related chronic disease. Considering the increasing presentation of patients with lifestyle-related chronic disease in general practice (Britt *et al.* 2012), it is anticipated that the demand on GPs to provide nutrition care to patients will increase in the future. The nutrition care provided by GPs requires further attention and support in order to optimise health outcomes of patients with lifestyle-related chronic disease in Australia.

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