Understanding the nutrition information needs of migrant communities: the needs of African and Pacific Islander communities of Logan, Queensland

Author

Williams, Emily, Harris, Neil

Published

2011

Journal Title

Public Health Nutrition

DOI

10.1017/S1368980010002740

doi:10.1017/S1368980010002740

Understanding the nutrition information needs of migrant communities: the needs of African and Pacific Islander communities of Logan, Queensland

Emily Williams and Neil Harris*
School of Public Health, Griffith University, University Drive, Meadowbrook, Queensland 4131, Australia

Submitted 21 February 2010: Accepted 27 August 2010

Abstract

Objective: The purpose of the present study was to investigate the nutrition information needs of the Pacific Islander and African migrant communities of Logan.
Design: The present study was structured as a needs assessment and used qualitative research methods. An integrative review was used to gather and analyse data relating to comparative and normative needs, while semi-structured interviews were undertaken for the felt and expressed needs.
Setting: Logan City, Queensland, Australia.
Subjects: African and Pacific Islander migrants and health and social service providers within the Logan region.
Results: The study identified the need for more accessible means of information delivery such as visual and face-to-face methods or hands-on demonstrations. The study found that information should be delivered in a staged approach on topics including food safety, Australian foods, healthy eating and diet–disease relationships, according to a migrant's length of residence in Australia.
Conclusions: The present study contributes to our understanding of the nutrition information needs of African and Pacific Islander migrant communities of Logan. These findings will enable the development of more appropriate nutrition information and health services for these Logan communities and other similar communities across Australia.

Keywords
Needs assessment
Migrant communities
Nutrition information

Sedentary lifestyles, high-energy diets and improvements in the standard of living are underpinning a worldwide disease epidemic associated with increasing rates of weight gain, overweight and obesity[1,2]. Overweight or obese individuals are at a higher risk of lifestyle-related diseases such as CVD, type 2 diabetes, cancer and other chronic health conditions[1,3]. The percentage of Australian men and women classified as obese doubled between 1980 and 1995[4]. Using recent prevalence statistics for obesity from Diabetes Australia, it is calculated that the financial cost of obesity for Australia is around $AU8·3 billion per annum[5].

The increasing rates of obesity are not merely a result of an individual's food and exercise choices[6]. Instead, changes in the physical and social environments contextualise behaviours and play increasingly important roles in the choices that individuals can make relating to food and exercise[7]. While the environment has a considerable influence on eating patterns and activity levels and therefore body weight of an individual, another powerful influence is that of culture[8]. It is acknowledged that an individual's cultural background impacts on all aspects of their lives, including their values, norms and beliefs about diet and physical activity[8].

A particular population recognised to be at increased risk of obesity is migrant communities. There are many challenges for migrants arriving into new cultures, as they are placed into new food systems, and new social and built environments[8]. Although migration occurs in most areas of the world, generally people move from less industrialised societies into more industrialised societies[8]. During the acculturation process, migrants who have arrived from so-called developing countries are replacing traditional healthier foods and active lifestyles for the typical higher-fat, higher-density foods and more sedentary lifestyle of the host country[9]. Thus, the acculturation process is associated with a higher risk of obesity and overweight[9].

Logan in south-east Queensland is a growing city that, as a favoured settlement area for migrants, hosts an increasing diversity of cultures[10]. Between 2001 and 2006 the number of African and Pacific Islanders arriving in Logan increased substantially[10]. With the large number of migrants arriving from culturally and linguistically

*Corresponding author: Email n.harris@griffith.edu.au

diverse (CALD) backgrounds, Logan must look at new approaches to provide these communities with appropriate health and social services including information on nutrition[11].

While health care is an essential component of efforts to deal with obesity, public health interventions focused on prevention should also be a priority to lessen the impact of the disease on individuals, communities and society as a whole[6]. A WHO consultation paper[2] identified nutrition and physical activity education for both adults and children as a strategy for obesity prevention. Most behavioural change models for health emphasise the importance of individuals gaining knowledge on specific health issues and incorporating this information into their daily activities[12]. For new migrants from less industrialised countries, it is often not clear what level of knowledge they possess and therefore what information they need. Accordingly, the present study was oriented on understanding the nutrition information needs of the Pacific Islander and African communities of Logan.

Methods

The research was conducted using a needs assessment framework as an approach for collecting data about major community needs, issues or concerns[13]. Within such a framework of enquiry there are four interrelated types of needs.

- Normative needs: defined by professional experts and are generally a reflection of professional judgements and standards.
- Comparative needs: compare services and resources of similar groups or populations to determine how their needs are being met/not met for similar circumstances.
- Felt needs: identified by community members themselves and often referred to as 'perceived' needs related to services, information and support.
- Expressed needs: arise from the translation of a felt need into an action or articulated demand for services[14–16].

Data collection and sampling

Consistent with a needs assessment process, multiple types and sources of data were incorporated into the study to create a rich and multi-faceted picture of the target community's nutrition information needs. An integrative literature review was undertaken to gather and synthesise information on the comparative and normative needs, while semi-structured interviews were undertaken to collect data on felt and expressed needs. The interview questions were piloted with colleagues, several service providers and members of the target community. The interview protocol comprised open-ended questions structured around utilisation and limitations in available health-related services (expressed needs) and information needs including mode of delivery for the target community (felt needs). Interviews were mostly conducted in person at locations of convenience for the participants, with several being conducted via telephone due to transport or time constraints.

A non-probability method of sampling was used for the semi-structured interviews. A purposive sample was taken of the Logan Pacific Islander and African community members with a total of ten African community members (including Congolese, Ethiopian, Burundian and Sudanese participants) and five Pacific Islander community members (including Samoans, Cook Islanders, Tongans and Māori) participating in interviews. A snowball method of sampling was used to select eight service providers from the local council, government health organisations and non-government community organisations. The principal researcher for the project conducted all interviews to ensure consistency in approach and facilitate depth of understanding of the community's perspective. The researcher was trained in cultural awareness and interview techniques, which, together with the use of an interview protocol, minimised interviewer bias. Ethics approval for the research was granted through the Griffith University Human Research Ethics Committee.

Data analysis

Data were organised and analysed using several methods. An integrative review of the academic and grey literature pertaining to normative and comparative needs was organised and examined at the international, national, state and local levels[13]. Data from the semi-structured interviews, conducted to examine the expressed and felt needs, were recorded and transcribed verbatim and then thematically analysed using emergent themes and phrases.

Results and discussion

At a broad level, preliminary analysis of the data obtained from the four needs identified two primary categories: nutrition information needs of the African and Pacific Islander communities and the delivery format for information. These categories encompass several interrelated factors, including the content of the information as well as the timing, format and barriers for delivering the information.

Information needs – content of the information

Upon arrival in Australia, the migrants received an overwhelming amount of information in a relatively short space of time[17]. According to the service providers, some migrants have never encountered many of the aspects of life that industrialised countries take for granted, such as cooking with electricity or catching a bus. In addition to enrolling in schools, English classes and establishing an income, they have to adjust to a new culture, new foods and different ideas about cooking methods and food hygiene[18]. As one service provider stated:

> If you have been given a pan each day with meal, all bland looking colours with a bit of oil and a bit of

PHN Public Health Nutrition

> salt and that's all you've had for 10 years and then you go to Woolworths – you can't even conceptualise what that might be like.

Consistent with this comment, many service providers indicated that it is necessary to start from the basics as a way of establishing good practices and habits in early settlement to have a positive long-term impact on nutrition behaviours. Food safety was identified as the most immediate information need, to avoid alienation by the wider population and to avoid food-borne illnesses. As one community member suggested:

> Teaching them that when they buy chicken from the markets they can't carry it around in a plastic bag while they talk to people, they need to take it straight home.

Medeiros *et al.*[19] acknowledge that poor food-handling practices can result in serious illness, making food safety education crucial. They found that information should be constructed around personal hygiene, ensuring adequate cooking time and understanding cross-contamination[19]. Cason *et al.*[20] identified a similar need for skills and information in these areas for migrant workers in Pennsylvania, USA.

In addition to food safety, service providers highlighted the importance of knowing what is available at the supermarkets as another immediate information need:

> We know for example that kids have taken tins of dog and cat food to school for lunch… It maybe has a fish… with maybe a cat looking at it and they don't realise it's food for a cat.

After this, many migrants need an introduction into the basics of Western-style cooking. This should include direction for using kitchen appliances, identifying and cooking with Australian ingredients, and basic budget strategies. As some community members stated:

> I am still confused about some foods such as meat. How to cook it and what is in sausages for example.

> There were some things that I didn't know. There were many vegetables grown in Australia, but we didn't think they were healthy.

While these comments indicate that there is a desire among the African community members to learn to cook with Australian ingredients, there is also a need for information on the ingredient content and nutritional composition of these unfamiliar foods. Likewise, Kruseman *et al.*[21] found that the main information need of an African migrant community in Geneva was for education on the names, uses and preparation of local foods in the absence of their traditional foods.

The Pacific Islanders acknowledged a need for information on similar topics, such as identifying unhealthy foods and cooking on a budget. However, some of their needs differ from those of the African communities. As one Pacific Islander community member commented:

> … It'd be good if someone could do something… where they have easy meals with simple direction, cheap ingredients and variety.

This comment suggests that the Pacific Islanders want to improve their established cooking practices in order to overcome barriers to good nutrition such as convenience and cost[6]. The Pacific Islander community members also identified topics on portion sizes and incorporating a variety of ingredients in cooking.

The Pacific Islander community members also stated that they would like practical information on creatively presenting healthier foods such as fruit and vegetables for their children. There have been numerous successful interventions that have provided information on healthy eating for children through schools and child-care centres[22]. Although the African community members did not raise this topic as a potential need for information, this comment was made by a community member:

> My kids told me what to pack for their school lunches, they said 'yes you put this and this in'.

This quote highlights a potential latent need for information and education regarding food provided for school lunches. Healthy lunchbox ideas and breakfast choices for children were also requested by the Pacific Islander communities. While resources such as the Dietary Guidelines for Australians are designed to provide information on healthy eating to individuals and families, it would appear from the above comments that a more practical application of the guidelines is needed for CALD communities[23].

Information needs – stages of need

Many of the service providers suggested the need for a staged approach to information delivery, in which information content is delivered based on length of time in the country. Service providers suggested that food safety and an introduction to supermarkets and the basics of Western-style cooking were the most immediate information needs. After meeting these initial needs, service providers suggested giving individuals or families time to establish their lives before providing them with further information:

> … by six months they have orientated themselves to time and place and kids are in school and they might have even started English classes by then. Maybe then we could start talking the basics…

At 6 months the service providers outlined the Australian Dietary Guidelines and the importance of providing healthy lunchboxes for school-aged children as the next basic information needs.

Between 18 months and 3–4 years of being in Australia, service providers acknowledged that migrants understand

PHN Public Health Nutrition

more about their life in Australia and can relate it to their own health:

> …People who have been here for about 18 months. They have a little bit more English, not very much but they feel comfortable, they know they can read street signs to get to places, they know they can catch trains and turn up to events.

According to the service providers this may be the time to discuss chronic health conditions with the community and how nutrition relates to their lifestyle including short- and long-term health.

Delivery of the information – deliverer of information

Kelaher and Manderson[17] identified four main models of health service and health information delivery: bicultural health worker (BCHW); multicultural health worker; mainstream-cross cultural training; and mainstream. The four models range from a member of a specific ethnic community delivering health education and information for members of that same ethnic group as for the BCHW, to services that are not specifically tailored to address cultural differences such as a mainstream service[17].

According to the service providers of Logan, African and Pacific Islander migrants have access to a range of mainstream health and social services including hospitals, medical doctors, child health clinics and Centrelink. Although these services are freely available to the whole population, they are not necessarily appropriate for people from CALD backgrounds. Language and cultural barriers can make it difficult for both the client and the service provider[24]. As one service provider commented:

> They [mainstream services] are not familiar with the interpreter service, they are using white middle class mainstream literature to educate, not being respectful of gender, religion…

This quote highlights the mismatch between services designed to meet the broader community's needs and the more particular needs of CALD migrants. Furthermore, there is a distinct lack of nutrition-oriented services due to a lack of capacity within the system, with the service providers all agreeing that more culturally appropriate nutrition-related services are required. Previously, the African community members had stated that they received much of their information from non-government settlement services in Logan. As well as this, both African and Pacific Islander community members rely on family and friends within the community network to provide them with nutrition information.

> My husband was here when I first arrived so I got lots of friends. So they help me do other stuff so in two weeks time I discover everything what we eat in Africa.

This highlights the peer support that exists within these migrant communities as well as the influence that friends and family have on an individual's lifestyle. This has been similarly documented in other communities[25]. Although small, these groups have a strong sense of community and tend to associate with those of the same nationality[26]. As social inclusion is very important to many of these groups, they utilise community networking and word of mouth to locate appropriate health and social services. Many service providers confirmed this, with the following comment:

> …they will come through somebody's door if they already know of somebody that has been to that service.

This quote identifies the importance of the 'grapevine' within migrant communities for information sharing. This has been suggested as an important strategy in other community development projects[26]. Many service providers felt that the most effective method of delivering information would be to increase the proportion of the workforce with a cultural background, rather than training a current service provider in cultural awareness. This could include a peer-to-peer learning approach in which members of the community are trained to deliver nutrition information:

> We have to have people with a multicultural background delivering these programmes. It adds credibility…

> …there is usually somebody in the community already and I think those kinds of people are much better at explaining the inner workings than we are.

The Go Girls! intervention used an academic to conduct small education sessions to deliver healthy eating and physical activity messages[27]. Upon evaluation of the project it was discovered that delivering the information using a community member as the educator would have been more effective[27]. Other projects such as the La Cocina Saludable education programme was successful because it identified established natural educators in the community and provided further training, in order for them to take on a 'peer educator' role[28].

Delivery of the information – format for information delivery

Information needs to be delivered in a manner that is appropriate for the populations of interest. Several providers suggested a more hands-on and visual approach rather than providing written information:

> …because some of the communities are not literate in their own language it needs to be much more visual. And… there needs to be lots of hands-on with them in that early settlement …

> Actually being able to demonstrate in a hands-on manner and then having them do it for themselves

NS Public Health Nutrition

These statements indicate that the African and Pacific Islander community members would benefit from more personal styles of communication. Nutbeam suggests personal forms of communication assist people to develop the confidence to act on health knowledge[29].

Delivery of the information – language

A major constraint for delivering nutrition information to African and Pacific Islander migrants is the existence of cultural and language barriers. When health and service providers do not share a common language and culture, the provision of health care can be compromised[24]. Wadden and Stunkard[30] suggested that delivering information to communities from CALD backgrounds requires a client-centred and flexible approach when there are substantial differences in language and cultural background between the information provider and client.

Occasionally, individuals are arriving from 'new' countries and there is no one to act as an interpreter. If there are interpreter services, they can be difficult to access, time-consuming to use and many health professionals are unfamiliar with using them:

> I have experience being with a client and trying to use Telephone Interpreting Services (TIS). It was extremely hard, especially when you are with a client in a doctor's surgery and the interpreter is on the phone.

In addition, trained interpreter services are costly and the quality of interpretation can suffer if an untrained interpreter such as a friend or family member is used[24]. Likewise, service providers acknowledged that many health professionals lack time, funding and the cultural sensitivity or understanding to provide appropriate services to these migrant communities. Although culturally sensitive health service professionals are available, service providers believe that there is a need for more, as well as a better distribution of the workload.

Conclusions

Education and information are an important component of health promotion[30]. This is more than just receiving a brochure; consumers need access to appropriate health information coupled with sufficient health literacy to utilise this information[30]. Efforts to communicate health information to consumers must also acknowledge the social and environmental influences of lifestyle choices[30]. This project sought to identify the nutrition information needs of the African and Pacific Islander migrant communities of Logan using a needs assessment framework.

The importance of improving uptake of nutrition information by taking the capacities of the target audience into account was a key finding of the present study. The target population identified a preference for greater in-person and visual formats for information delivery, with hands-on demonstrations being particularly appropriate. Furthermore, these methods of information delivery should be undertaken by bicultural or ethnically similar persons to increase community and individual engagement. This would enable health workers to have a more intimate understanding of the African and Pacific Islander communities. This, in turn, would assist in minimising constraints and barriers to accessing nutrition information, such as language and cultural disparities between health workers and community members.

The present study has particularly identified that the content and timing of information should be based on a staged approach for information delivery that tailors information to community members based on their time in the country. Using the findings from the present study, the content of the information could be delivered as follows.

- Within 6 months of arrival: food safety; how to identify, cook and prepare Australian foods, and budgeting.
- Six to 18 months after arrival: information on the Australian dietary guidelines and healthy lunchboxes.
- Eighteen months to 3 years after arrival: education on the diet–disease relationships and how nutrition and physical activity impact on health.

Matching information dissemination strategies to needs and capabilities of target communities is critical for the uptake of the message. The cultural and linguistic diversity of the African and Pacific Islander communities of Logan and elsewhere across Australia presents many challenges for health service and health information delivery. Yet, if these communities are to be meaningfully assisted to integrate into the Australian society then service providers must develop information resources and interventions, including for nutrition, that are sensitive to the cultural norms and needs of the African and Pacific Islander communities.

Acknowledgements

The present study was supported by the Logan-Beaudesert Place Based Initiative of Queensland Health. The authors have no conflicts of interest. E.W. participated in the design of the study, conducted the study and analyses of the results, and participated in the preparation of the final manuscript. N.H. developed the basic idea for the study, participated in the design of the study, supervised the conduct of the study and analyses of the results, and participated in the preparation of the final manuscript.

References

1. Cameron AJ, Welborn TA, Zimmet PZ *et al.* (2003) Overweight and obesity in Australia: the 1999–2000 Australian Diabetes, Obesity and Lifestyle Study (AusDiab). *Med J Aust* **178**, 427–432.

2. World Health Organization Consultation (2000) *Obesity: Preventing and Managing the Global Epidemic WHO Technical Report Series* no. 894. Geneva: WHO.
3. Asia Pacific Cohort Studies Collaboration (2007) The burden of overweight and obesity in Asia-Pacific region. *Obes Rev* **8**, 191–196.
4. Timperio A, Cameron-Smith D, Burns C *et al.* (2000) The public's response to the obesity epidemic in Australia: weight concerns and weight control practices of men and women. *Public Health Nutr* **3**, 417–424.
5. Access Economics Pty Ltd (2008) *The Growing Cost of Obesity in 2008: Three Years On*. Canberra: Access Economics; available at http://www.diabetesaustralia.com.au
6. Wang SS & Brownell KD (2005) Public policy and obesity: the need to marry science with advocacy. *Psychiatr Clin N Am* **28**, 235–252.
7. Canoy D & Buchan I (2007) Challenges in obesity epidemiology. *Obes Rev* **8**, Suppl. 1, 1–11.
8. Sobal J (2001) Social and cultural influences on obesity. In *International Textbook of Obesity*, pp. 305–322 [P Björntorp, editor]. Chichester: John Wiley & Sons, Ltd.
9. Keller K (2008) *Encyclopaedia of Obesity*. Thousand Oaks, CA: SAGE Publications.
10. Logan City Council (2008). *Cultural Diversity in Logan City*. Logan City: Logan City Council.
11. Magnusson MB, Hulthén L & Kjellgren KI (2005) Obesity, dietary patterns and physical activity among children in a suburb with a high proportion of immigrants. *J Hum Nutr Diet* **18**, 187–194.
12. Borzekowski DL & Rickert VI (2001) Adolescent cybersurfing for health information. *Arch Pediatr Adolesc Med* **155**, 813–817.
13. Neuman WL (2006) *Social Research Methods: Qualitative and Quantitative Approaches*. Boston, MA: Pearson Education Inc.
14. Jones L, Katz J & Sidell M (2000) Planning health promoting interventions. In *Promoting Health: Knowledge and Practice*, 2nd ed., pp. 256–273 [J Katz, A Peberdy and J Douglas, editors]. Oxford: The Open University.
15. Douglas J, Lloyd C & Sidell M (2007) Using research to plan multidisciplinary public health interventions. In *Theory and Research in Promoting Public Health*, pp. 297–326 [S Earle, CE Lloyd, Sidell M *et al.*, editors]. London: Sage Publications.
16. Naidoo J & Willis J (2000) *Health Promotion: Foundations for Practice*, 2nd ed. Edinburgh: Elsevier Limited.
17. Kelaher M & Manderson L (2000) Migration and mainstreaming: matching health services to immigrants' needs in Australia. *Health Policy* **54**, 1–11.
18. Renzaho AMN & Burns C (2006) Post-migration food habits of sub-Saharan African migrants in Victoria: a cross-sectional study. *Nutr Diet* **63**, 91–102.
19. Medeiros LC, Hillers VN, Kendall PA *et al.* (2001) Food safety education: what should we be teaching to consumers? *J Nutr Educ* **33**, 108–113.
20. Cason K, Nieto-Montenegro S & Chavez-Martinez A (2006) Food choices, food sufficiency practices, and nutrition education needs of Hispanic migrant workers in Pennsylvania. *Top Clin Nutr* **21**, 145–158.
21. Kruseman M, Barandereka NA, Hudelson P *et al.* (2005) Post-migration dietary changes among African refugees in Geneva: a rapid assessment study to inform nutritional interventions. *Soz Präventivmed* **50**, 161–165.
22. Carson D & Reiboldt W (2007) P3 The food and fitness fun education program: an after-school intervention. *J Nutr Educ Behav* **39**, S105–S106.
23. Patterson K (2003) *Speeches: Launch of Dietary Guidelines*. Canberra: Australian Government Department of Health and Ageing; available at http://www.health.gov.au/internet/main/publishing.nsf
24. Hornberger J, Itakura H & Wilson SR (1997) Bridging language and cultural barriers between physicians and patients. *Public Health Rep* **112**, 410–417.
25. Green J, Waters E, Haikerwal A *et al.* (2003) Social, cultural and environmental influences on child activity and eating in Australian migrant communities. *Child Care Health Dev* **29**, 441–448.
26. Dounchis JZ, Hayden HA & Wilfley DE (2001) Obesity, body image and eating disorders in ethnically diverse children and adolescents. In *Body Image, Eating Disorders, and Obesity in Youth: Assessment, Prevention, and Treatment*, pp. 67–98 [JK Thompson and L Smolak, editors]. Washington, DC: American Psychological Association.
27. Resnicow K, Yaroch AL, Davis A *et al.* (2000) Go Girls!: Results from a nutrition and physical activity program for low-income, overweight African American adolescent females. *Health Educ Behav* **27**, 616–631.
28. Taylor T, Serrano E, Anderson J *et al.* (2000) Knowledge, skills and behavior improvements on peer educators and low-income Hispanic participants after a stage of change-based bilingual nutrition education program. *J Community Health* **25**, 241–263.
29. Nutbeam D (2000) Health literacy as a public health goal: a challenge for contemporary health education and communication strategies into the 21st century. *Health Promot Int* **15**, 1–10.
30. Wadden TA & Strunkard AJ (editors) (2002) *Handbook of Obesity Treatment*. New York: The Guilford Press.