

Promoting the get healthy information and coaching service (GHS) in Australian-Chinese communities: facilitators and barriers

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Summary

Obesity and being overweight are major public health concerns that health coaching can assist people to manage through encouraging self-management and behaviour change. The Get Healthy Information and Coaching Service (GHS) is a telephone health coaching service in Australia that has effectively improved the health of the general population but has had less participation of culturally and linguistically diverse (CALD) populations. The Chinese population is the largest migrant group in Australia with increased risk of diabetes but had reduced access to the GHS program due to communication barriers. The GHS developed a pilot program for Chinese (Mandarin and Cantonese-speaking) communities using bilingual coaches and translated material to address these barriers. Qualitative research was undertaken with Chinese stakeholders (14 interviews) and 11 program participants from the group which had completed the program (2 focus groups in Mandarin and Cantonese) to understand their experiences and the success of promotional activities. This research does not contain the experiences of the people that withdrew from the program. The bilingual program was culturally and linguistically appropriate and addressed risk factors for chronic conditions. Participants formed positive relationships with bilingual coaches who they preferred to interpreters. They felt the program promoted healthy eating, weight and physical activity. Although Chinese stakeholders had concerns about participants’ ability to goal set, participants said they met their health goals and were committed to the GHS program. Strategies to enhance the program included promoting the bilingual GHS to the communities and stakeholders. Factors to consider beyond language in adapting the program to the Australian Chinese communities include meeting the heterogenous needs of the older population, ensuring community engagement and addressing cultural beliefs and practices.

Lay Summary

Obesity and being overweight are major public health concerns that health coaching can assist people to manage. The Get Healthy Information and Coaching Service (GHS) is a government telephone health coaching service that has improved the health of the general population but has had less

participation of culturally and linguistically diverse populations. The Chinese population is the largest migrant group in Australia with increased risk of diabetes but had reduced access to the GHS program due to communication barriers. The GHS developed a pilot program for Chinese (Mandarin and Cantonese-speaking) communities using bilingual coaches and translated material. Findings from 14 interviews with Chinese stakeholders and two focus groups (in Mandarin and Cantonese) with program participants sought to understand their experiences and success of promotional activities. Results demonstrated the bilingual program was culturally and linguistically appropriate. Participants formed positive relationships with coaches and felt the service promoted healthy eating and weight, and physical activity. Although Chinese stakeholders had concerns about participants' cultural familiarity with goal setting and achieving long-term change, participants said that they met their goals and were committed to the program. Strategies to enhance the program will include promoting the bilingual GHS to the communities and stakeholders.

Key words: health coaching, Chinese, chronic disease

INTRODUCTION

Obesity and being overweight are major public health issues which can contribute to increasing chronic conditions and mortality in Australia (Australian Institute of Health and Welfare (AIHW), 2017). Chronic disease, which could be prevented by more effective patient management, accounts for over a third of hospitalizations and costs 320 million dollars annually (Swerissen *et al.*, 2016). Internationally, there have been calls to reduce the avoidable burden of chronic conditions and take a coordinated systemic approach to ensure the health of the population (World Health Organization (WHO), 2013). This includes investing in preventative programs, addressing the determinants of health and other risk factors (World Health Organization (WHO), 2016; Australian Health Ministers' Advisory Council (AHMAC), 2017). The WHO endorses developing an integrated response to chronic disease including enabling supportive environments, empowering communities, coordinating services, reorientating health care and strengthening governance. Health coaching has gained evidence as an effective way to manage chronic disease so individuals can self-manage their conditions and implement healthy lifestyle behavioural changes (Lindner *et al.*, 2003, Linden *et al.*, 2010). Not all patients can successfully self-manage their conditions and actively engage in behaviour change, as some may have the expectation that their health provider will tell them what to do (Wagner *et al.*, 1996; Wagner, 2019). Although there has been research on the effectiveness of health coaching approaches for chronic disease management in general (Butterworth *et al.*, 2007; Wolever *et al.*, 2013; The Evidence Centre, 2014), there have been a limited number of studies which have explored coaching effectiveness in culturally and linguistically diverse (CALD)

migrant communities (Sathe *et al.*, 2013; Handley *et al.*, 2016). In some CALD communities such as the Chinese communities, research has highlighted that an acceptance of health authority and collective understanding of health care responsibility is more widespread than individualized self-management approaches (Choi *et al.*, 2015).

The Get Healthy Coaching and Information Service (GHS) commenced in New South Wales, Australia in 2009 as part of a national strategy to promote health and reduce chronic disease (Council of Australian Governments (COAG), 2006; Commonwealth Department of Health, 2008). GHS is a 'free telephone-based lifestyle program . . . [which] includes 10 individually tailored calls provided by qualified health coaches over a 6-month period' (Cranney *et al.*, 2018, p. 1). GHS has been effective in improving healthy eating, physical activity, and healthy weight in the general population (O'Hara *et al.*, 2011, 2012a,b, 2014, 2015). It has also aimed to reduce risk factors associated with chronic illness in populations most at risk such as for Aboriginal Australian communities (Quinn *et al.*, 2017).

In 2014, an analysis of the GHS identified that 8% of participants who completed the program spoke a language other than English at home, compared with 24.6% of the general Australian population (O'Hara *et al.*, 2014, Australian Bureau of Statistics (ABS), 2011), despite the program providing interpreter support. People from CALD backgrounds were identified as priority populations for targeted promotion and GHS program partnerships (O'Hara *et al.*, 2014). CALD populations face a range of barriers in accessing health services, which indicates the urgency of addressing their health care needs and inequities in health outcomes (NSW Ministry of Health, 2019). The impact of health

beliefs, practices and social determinants on health outcomes for chronic disease also needs to be considered in tailoring health promotion programs (Australian Health Ministers' Advisory Council (AHMAC), 2017; Jang *et al.*, 2021).

The Chinese communities have been identified as a population group with increased risk factors. Although <1% of GHS program users represent the Chinese population, 3.2% of NSW population spoke Mandarin and 1.9% spoke Cantonese (Cranney *et al.*, 2018; Australian Bureau of Statistics (ABS), 2016). Chinese communities are a growing population group in Australia who have an increased risk of Type 2 Diabetes and gestational diabetes (Holdenson *et al.*, 2003; Shen *et al.*, 2011; Girgis *et al.*, 2012; South Eastern Sydney Local Health District (SESLHD), 2013; Guo *et al.*, 2015). Behavioural risk factors such as physical inactivity and low vegetable intake are higher for people born in China compared with those born in Australia (Centre for Epidemiology and Research, 2010). This research acknowledges the impact of migration change and acculturation on lifestyle and eating patterns (Wahlqvist, 2002; Jin *et al.*, 2017).

In 2015, two local health districts in Sydney New South Wales, piloted the GHS with Chinese (Cantonese and Mandarin speaking) communities. Prior to commencement, the Chinese communities were surveyed, and stakeholders engaged to inform the future delivery of the GHS (Cranney *et al.*, 2018). The Chinese communities indicated that they were interested in the program but were not currently using the GHS as it was only available in English with the use of interpreters. As a result, key features of the Chinese GHS (CGHS) included: the employment of bilingual/bicultural personalized coaches; translation of the written resources into simplified and traditional Chinese; and promotion through community organizations serving Chinese communities.

At the end of the pilot bilingual program, qualitative research was used to explore stakeholder and graduand participant perceptions of the CGHS since it had been in operation, including the effectiveness of promotion, resources, and program delivery. Quantitative research was also conducted to test the model and collect data to describe participants and their participation in the program (Sydney Local Health District (SLHD) and South Eastern Sydney Local Health District (SESLHD), 2019). This research contributes to addressing the health needs of the Chinese people in a culturally and linguistically appropriate way including the acceptance of the concept of coaching by participants. It addresses inequities in health outcomes and risk factors for chronic disease and contributes to previously conducted quantitative research about the number and type of participants.

METHODS

Study design

A qualitative research design based on a phenomenological approach was selected to understand the participants' experiences and constructed meanings (Patton, 2002; Green and Thorogood, 2018). Focus groups and interviews were selected to clarify the project objectives. Research methods are further outlined in [Supplementary File S1](#) using the consolidated criteria for reporting qualitative research (Tong *et al.*, 2007). Ethical approval for this program was obtained from the SLHD and SESLHD Human Research Ethics Committees (HREC Ref. Nos X15-0405 and LNR/15/RPAH/549).

Focus groups

One Cantonese-speaking and one Mandarin-speaking focus group was undertaken in March 2018 to explore the Mandarin- and Cantonese-speaking participants' experience with the program. Focus groups allowed a rich data to be collectively generated with a group of participants over a short period (Quine, 1998a,b). Questions were designed to bring out their experiences, both positive and negative, changes in knowledge and practice, and their use of resources (see [Supplementary Appendix SA1](#)). The details of GHS near-graduating and/or graduated participants were obtained from the GHS senior project officer with the Office of Preventive Health. A Bilingual Research Assistant (BRA) contacted participants by phone to invite participants to join a focus group. The purpose and process of the focus group and the associated consent process were explained during the phone conversation. Participants who gave verbal consent over the phone were then sent confirmation information. These participants were purposefully selected to gain a deeper understanding of the project objectives not to generalize (Kuzel, 1999). The BRA, with the assistance of a Focus Group Scribe, facilitated two focus groups containing CGHS participants who had completed the program. Each focus group consisted of five to six participants; one was conducted in Mandarin and the other in Cantonese. The focus groups were audio recorded, transcribed into traditional and simplified Chinese and then translated into English by an accredited service. Each focus group was ~1 h and 20 min in length, as indicated in the Participant Sheet.

Interviews

Stakeholder semi-structured individual interviews were conducted from February to April 2018 to seek information about the effectiveness of promotional activities, referral pathways, program recruitment/

participation and model appropriateness and usefulness since the bilingual program had commenced (see [Supplementary Appendix SA2](#)). Interviews allowed people to answer questions accurately, freely and openly about their experiences and answers can also be clarified if unclear ([Stewart and Cash 1991](#); [Quine, 1998a,b](#)). The BRA purposefully selected fourteen stakeholders working with the Chinese communities such as general practitioners (GPs), community workers and health professionals, some of whom were associated with earlier stages of the project ([Cranney et al., 2018](#)). The BRA first contacted the stakeholders by phone to explain the research and consent process, and then a confirmation email to the agreed participants about location and scheduling of their interview. The Participant Information Form and Consent Form were also provided to participants prior to the interview to ensure that they were able to make informed consent to participate at the interview. A Research Consultant (RC) and Research Assistant conducted the interviews in English. These lasted for ~45 min in the participants' workplaces and community centres. Interviews were audio recorded and then transcribed.

Coach reports

Reports were also obtained by the CGHS from two bilingual/bicultural coaches working in the program. These sought information about the usefulness of the program, health concerns of participants, ease of communication, barriers to a healthy weight and recommendations for improvement. These reports were analysed together with the interviews and focus groups.

Data analysis

An inductive approach was taken to analyse the interviews so that themes emerged directly from the data ([Gifford, 1998](#); [Liamputtong and Ezzy, 1999](#)). Such an approach acknowledges the contextual knowledge base of the researchers in the coding and analysis ([Thorne, 2016](#)). Transcripts of the data were coded into categories according to patterns in the research. The computer software package NVivo 12 assisted with data management and qualitative analysis ([QSR International, 2019](#)). To enhance research validity and transparency, the RC met with other researchers at the university and BRA to review the transcripts and coding categories.

RESULTS

Participants

At the end of the pilot CGHS program, results showed that 162 people enrolled in the GHS, with 26 selecting

information-only and 136 receiving bilingual coaching on the phone. Of that, 33 had graduated at the time of pilot analysis with a further 46 continuing to receive the service and 57 withdrawing prior to graduation (Sydney Local Health District (SLHD) and South Eastern Sydney Local Health District (SESLHD), 2019).

For the two focus groups with 11 participants who had graduated from the CGHS, each group had mixed genders but were mainly female and consisted of participants who were aged 35 to over 75 years old. Countries of birth were from China, Hong Kong and Vietnam. The first group consisted of some earlier arrived groups to Australia compared with the second group. Further details are outlined in [Table 1](#). Most participants did not speak English at home.

Fourteen stakeholders working with the Chinese communities from a range of professions were interviewed. These included multicultural health workers, health professionals, allied health, communities support workers and specialist Chinese workers in government organisations. Further details are outlined in [Table 2](#).

The focus groups, service provider consultations and coach reports were analysed to understand the Chinese communities' experience of using the GHS. Themes that emerged included improved health and wellbeing for at risk groups; the importance of tailoring the program to the communities' linguistic and cultural needs (including goal setting and addressing chronic disease risk factors and enhancing service implementation to suit the heterogeneous needs of the communities).

Improved health and wellbeing for at risk groups in the population

There was general agreement from stakeholders, participants and bilingual coaches that CGHS was relevant and addressed the communities' health needs, especially for older people.

Being active, health and weight, [is important] especially for these older people. They are more focused about their health, so they read this information . . . People pay a lot of attention to getting healthy . . . Stakeholder 4

Stakeholders explained Chinese communities already have a system to ensure they are healthy, and they are interested in food choices according to traditional medicine concepts.

Chinese culture, [there are] a lot of restrictions. They [view] the body as Yin and Yang and also put their food as Yin and Yang. Some food you can't touch, the Yang

Table 1: Details of focus groups

Focus group number	Focus groups									
	Language groups	Location	Date	Number of people	Gender	Age group	Education	Country of birth	Language spoken at home	Years in Australia
1	Cantonese	Campsie-Community centre	5 March 2018	6	Male: 2 Female: 4	36–50: 0 51–65: 1 66–74: 3 75 > 2	Tertiary: 3 Secondary: 3 Primary: 0	China: 2 Hong Kong: 2 Vietnam: 1	Mandarin: 0 Cantonese: 6 Mandarin and Cantonese: 0	3–5 years: 0 6–10 years: 0 >10 years: 6
2	Mandarin	Campsie-community centre	19 March 2018	5	Male: 1 Female: 4	36–50: 1 51–65: 2 66–74: 1 75 > 1	Tertiary: 4 Secondary: 1 Primary: 0	China: 4 Hong Kong: 1	Mandarin: 3 Cantonese: 0 Mandarin & Cantonese: 2	3–5 years: 2 6–10 years: 0 >10 years: 3

Table 2: Details of stakeholder interviews

Number of participants	Stakeholder occupations
2	Bilingual GPs
1	Bilingual dietician
2	Bilingual settlement service workers
2	Multicultural health workers (Chinese)
1	NSW Government CALD services specialist (Chinese)
1	Child services manager (Chinese)
2	Community workers (Chinese)
2	Support workers (Chinese)
Total: 14	

food or the Yin food. It would decrease the energy in your body, stuff like that. Stakeholder 13

Participants said the GHS addressed health concerns, increased knowledge of nutrition, assisted them in reaching their health goals and improved overall health and well-being. They also felt that if they were healthy, they were less of a burden to society and the health system. For some, these results were some of the most important benefits of the program which exceeded their expectations.

I did not expect mental health support, spiritual support, these are very important ... In the beginning, I did not have much understanding. Later on through their coaching ... I am not only physically better than before, but also happier emotionally, so very grateful. ... Participant D, Cantonese focus group

The service was also important for people who spent most of their time at home, new mothers and those with chronic health conditions, as well as those concerned about confidentiality as it took place over the phone rather than in person.

Tailoring the GHS to Chinese communities

The program was tailored to the communities through ensuring participants gained access to culturally and linguistically appropriate information. It addressed their specific information needs to reduce the risk of chronic disease and ensured participants were committed and goal set.

Stakeholders had concerns about the type and depth of health information provided as part of the GHS program and the ability of the participants to meet individualized health goals without a lot of assistance from the health coach. In contrast to these concerns, participants were surprised about the depth of information provided,

were committed during the program's duration, and reached their identified health goals. This demonstrates the need to raise stakeholders' understanding of the success of the program and the nature of the information provided.

Linguistically and culturally appropriate information to meet needs in migration

Stakeholders and participants felt that the bilingual/bicultural nature of the program was critical to its success and overall effectiveness. The provision of bilingual coaches meant they understood the communities' culturally specific food choices and lifestyles, could converse in language without interruption and provide in-depth assistance and information.

It will be much better for them to communicate; a lot complain about the interpreter. So, if they can use their own language, [this] will make them feel comfortable to tell [the coaches] their issues. Stakeholder 3

Having a bilingual service enabled better outcomes for those with low English proficiency as it increased the participants' understanding. The provision of interpreters alone was not enough to engage participants to use the service, as illustrated by the feedback received by a community worker.

[Potential participants] got the [GHS] information, but they are scared. They think, "If I call maybe they have to speak English or something." They can't understand, so they do not use ... they didn't [call]. Stakeholder 10

Stakeholders stated that the program gave participants access to health promotion information relevant to the Australian context which addressed their health needs. Preventive disease health information was even more important to communities due to changes in lifestyle and eating patterns since migration.

It's a really good model for the Chinese community because even people in China ... there is not this service for them ... especially for newly arrived immigrants, after they come to Australia, ... they change their lifestyles, they change their eating habits and the food ... They need someone to guide them or coach them. Give them professional advice ... When I talk to the groups, people are very interested. Stakeholder 4

Stakeholders stated that there were no preventive health campaigns, nor access to professional health advice to prevent illness in their native countries, and that the CGHS addressed this. This understanding was reinforced in focus groups.

When we were in China, we did not have this type of knowledge in nutrition. ... when (we) came here, there are still quite a lot of supermarkets, really all-junk food. Not sure which one to choose ... Actually, many things should not have been bought. Also, we learned to read the table of nutrition, or table of ingredients. Mandarin focus group

There was also a lack of written information available in Chinese in Australian libraries about preventative health and treating chronic diseases. The books from overseas were not that relevant as they contained information about Traditional Chinese Medicine and herbs unavailable in Australia.

I can hardly find any publisher that publishes health books in Chinese. So most of our health books are from overseas ... they are not related to us. Our collection on health ... is definitely not enough to help the growing needs of the community. Librarian, Stakeholder 8

Addressing the participants' need for in-depth nutritional information

The communities and stakeholders required clarification of the nature of the health information provided in the GHS by coaches and in the health resources. There is already a lot of existing health information circulating online in Chinese communities and social media about new cures for diseases, which has created uncertainty about the health information provided in the GHS. Stakeholders felt information should not be too basic and should focus on the health needs of older people, so it needs to be more targeted. Stakeholders received feedback from clients who had discontinued the program that they wanted more specific and in-depth information.

[A GHS participant] said that because the coach said something they already knew ... because ... they got different [information] from the Internet ... they stop. Maybe we need a little bit deep, higher level." Stakeholder 10

Program information had to complement traditional health concepts held by the older population. Stakeholders discussed younger coaches needing training to work with older people and to understand traditional food concepts.

[Older people] are still choosing to use the Traditional Chinese Medicine way ... Because [this] way is actually to maintain health, whereas the western way is disease management. ... So, for them being sick is because they haven't maintained their health properly. ... A lot of the

Chinese elderly take tonics and different powders and stuff, rather than taking medicine when they are really sick. ... You have to check what they eat daily or routinely to maintain their health. Stakeholder 12

In contrast to the stakeholder concerns, participants felt they obtained detailed information that was tailored to their needs and beyond their expectations.

I have a strong desire for knowledge ... When [the coach] first called me, she was very good. I said "I have read many books" ... I thought I understood things ... I thought that this service is quite good. Because as you can tell, I do not know ... Once she had learned about me, she would then tell me how to eat. Participant E, Cantonese focus group

Participants in the focus groups were surprised about the amount of information they received about nutrition and promoting health. One participant commented that they learnt how to check the fat and sugar content of foods, something with which they were unfamiliar.

[The coach] was really good. I was always looking at the sodium levels on those labels and when you buy things ... Wow, more than 1000, very high! But I never knew the limit, she said 400 or under. Now I know how to read it ... She really taught me in a very clear way. Participant A, Cantonese Focus Group

Participants were able to access information from the coach about not just what to eat and how to exercise but also the health *reasons* behind certain food choices and exercise regimes.

The most helpful thing to me was the very accurate information they were able to provide. It was about why (you) would need to drink this amount of water, why eat five portions of vegetables, why exercise. Participant E, Mandarin Focus Group

Although not specialists in chronic illnesses, coaches gave information about preventing chronic illness and healthy lifestyles. If coaches could not answer questions immediately, they provided information during the next coaching session.

Ensuring participants committed to the program and set goals

Stakeholders had concerns about the ability of the communities to commit to a 6-month program and reach healthy lifestyle goals. They explained communities may expect quick results and may not be used to taking a proactive approach to their health care. The main client base of older people and those with less western

education may expect the health professionals to tell them what to do.

It was challenging to set goals and/or to break that down into action steps. This is definitely something new to them culturally. Bilingual Coach 2

A nutritionist explained the approach to take when setting goals with the communities, if participants are reluctant to take a proactive approach.

They're probably not going to end up doing it themselves ... the goal needs to be more specific and as the coach you need to suggest more specific things and pretty much tell them what to write down ... if you can give them very practical goals like that, they do have that trust in you ... Stakeholder 7

Participants demonstrated that they embraced meeting health goals, achieved positive outcomes and discussed the relationship and trust they formed with the coach. For example, one participant was committed to getting fit and developed a detailed long-term exercise plan.

With sport, you need to do it every day. Not just every now and then as it becomes too strenuous. When you get older, it can easily cause injury ... [The coach] would teach me to make a plan and do what sport at what time ... You would have a handwritten plan, you don't have to do much in a day, you should do it for five days ... From then on, my exercise became quite even. Participant D, Cantonese Focus Group

Participants in the focus groups discussed how goals were realistic and could be customized to their needs. Plans were made that involved lifestyle changes, and more effective forms of exercise to achieve better results, over a shorter time.

Enhanced service implementation

Stakeholders and participants were asked about how the GHS program and resources could be enhanced. Results indicated that there could be more active promotion with stakeholders and the communities, registration could be streamlined, resources enhanced and additional support provided.

Active clear promotion of bilingual program to the communities

Most of the stakeholders were unsure about the details of the GHS including the provision of bilingual/bicultural support, how to use program information and how it could improve health. As a result, they were unlikely

to promote the program or to make referrals. Stakeholders said they would refer clients to the service if bilingual coaches could be assured but not if they had to use the interpreter service.

The uniqueness of the program and difference from other programs should also be highlighted. Unlike other short-term health programs in the Chinese communities, the GHS is conducted over 6 months, delivered over the phone, and needs commitment from participants.

The professional background of the coach should be explained so that stakeholders and participants can develop confidence in them. As participants didn't refer to them as 'coaches', stakeholders said to refer to them as 'trained professionals' or 'nutrition instructors'.

Stakeholders and participants said social media was also important and could be accessed by young people as well as old. Wechat is popular with the Mandarin speaking communities, whereas Weibo and Whatsapp are popular with Cantonese speakers.

Enhancement of translated booklets for Mandarin and Cantonese speakers

The diversity of translated scripts in the Chinese communities meant some participants received the Simplified Chinese version instead of the Traditional Chinese version, and vice versa. Some participants also said it was useful to have access to English and Chinese script in the booklets, so they can learn local terms for products. For example, for the word 'potato', there are different translations depending on the region of migration.

Hong Kong people call it 'shuzai', Northern Chinese call it 'tudou', it's the same thing. In English it is called 'potato'. Participant D, Cantonese focus group

Although pleased with the cultural appropriateness of the booklet, stakeholders advised adding more Asian content and providing more food examples and recipes. Examples of measurements would be helpful as participants were unfamiliar with the metric system of measuring food as previously, recipes and food quantities were usually shared informally from person to person.

In China before, we never have a recipe book ... Sometimes I cook yummy dumplings ... [People] are always asking about ingredients, "How much is the amount?" I said, "In China, [we] put in this, put in that, put salt and you just taste it, it's up to you... We don't have [measurements] exactly". Stakeholder 5

Stakeholders were also concerned about the advice on eating less fat, salt and meat. They felt participants would not know how to replace or modify ingredients in

traditional recipes to make them more healthy; it was difficult to change cooking methods and still ensure the right taste.

For the Chinese, we almost fry everything! So, when we cook, we use a lot of oil and salt. If you say, "Oh, this is not healthy!" They will say back to us, "How can we cook?" Stakeholder 4

In the focus groups, participants reported that they had tried to alter dishes to make them healthier, but found the taste was not as good.

Previously, the vegetables I used to eat were quite simple, now ... I would put more than ten different vegetables. So, the flavour was not the best, but there would be enough nutritious value. Mandarin focus group

Content could be more user friendly by adding frequently asked questions, specific examples and phone numbers so participants can directly contact the bilingual service. Others said older people may need bigger font sizes and more writing space.

Providing additional program support

Participants explained that face-to-face meetings could enhance participant retention and motivation, and may be a more familiar format for older people. In this way, participants can learn from others, and activities could include cooking demonstrations or a supermarket tour. Online groups were also suggested to assist motivation, sharing information and planning meet ups. Other incentives included the development of an 'App' or an electronic application that could be downloaded on the mobile phone, GHS merchandise, a certificate awarded at completion and recipe books.

DISCUSSION

The qualitative evaluation of the GHS program indicated that stakeholders and participants found it effective in promoting healthy eating, physical activity, and improving chronic health conditions. Although the linguistic and cultural appropriateness of the program allowed participants to improve health outcomes, stakeholders had concerns around the participants' commitment and goal setting ability. These concerns were not reflected in the focus group findings with participants.

Bilingual service for better results

An essential factor contributing to the effectiveness of the GHS with participants was ensuring it was bilingual. Participants were reluctant to use the GHS with an interpreter and stakeholders were hesitant to recommend a

monolingual program to those with limited English proficiency. This reluctance confirmed previous findings from the Chinese stakeholders and community members who stated a bilingual service would be critical to its success (Cranney *et al.*, 2018). The bilingual/bicultural service provision enabled participants to form strong relationships with coaches over the phone, reach tailored goals, ensure better health outcomes, and reduce risk factors for chronic disease. As well as speaking the language of the participants, the use of bilingual staff in health promotion campaigns has allowed them to understand the social and cultural norms in the Australian-Chinese communities (Chan and Quine, 1997; Ahmad *et al.* 2004; Kwok and Sullivan, 2007; Blignault *et al.*, 2008; Choi *et al.*, 2015). Other adaptations of health promotion programs for CALD communities have discussed the inclusion of bilingual staff as being integral to reaching health objectives (Jang *et al.*, 2021) especially in promoting the effective self-management of patients (Pan *et al.*, 2019) and in health coaching over the phone (Handley *et al.*, 2016). The importance of bilingual staff has also been reported when working with Chinese communities (Chan and Quine, 1997; Kwok and Sullivan, 2007).

Keeping healthy to reduce the risk of chronic disease

Stakeholder and focus group participants confirmed the importance of health to the Chinese communities including the importance of physical activity and healthy eating (Cranney *et al.*, 2018). Participants reaffirmed that they receive a lot of general health information in the Chinese media as well as from family, friends, and Chinese-speaking GPs (Cranney *et al.*, 2018). However, there is a lack of specific translated information about preventing and managing chronic disease available in Australia (Choi *et al.*, 2015). This reinforced previous research conducted with Chinese communities that found there was a lack of awareness about healthy lifestyles in reducing chronic disease (Cranney *et al.*, 2018). This information is important due to the higher risk of chronic disease than in the Australian population (Holdenson *et al.*, 2003; Shen *et al.*, 2011; Girgis *et al.*, 2012; Guo *et al.*, 2015), and indications of decreased vegetable intake and exercise because of migration and the impact of western lifestyles (Centre for Epidemiology and Research, 2010; Cranney *et al.*, 2018). The quantitative component of the CGHS demonstrated statistically significant improvements in daily vegetable consumption and the number of physical activity sessions per week of participants (Sydney Local Health District (SLHD) and South Eastern Sydney Local Health District (SESLHD), 2019).

Although stakeholders had concerns about the simplicity and relevance of the information provided, GHS program participants reported increased knowledge regarding the importance of healthy lifestyle behaviours, a balanced diet, and effective forms of exercise. Nutrition information is effective when combined with advice about behaviour change (Contento, 2008, 2011), which the health coaches were able to provide to participants. Participants were surprised by the depth of information they received, indicating communities need to be informed about the role of the information provided in preventing chronic disease. However, this information cannot replace the medical advice of chronic disease specialists.

Ability of participants to goal set and commit to the program

Stakeholders' concerns regarding the commitment of participants to the program were contrasted with participants' experience of successful goal setting. Previous research has also indicated the tendency for the Chinese communities to expect a quick fix for treating illness rather than the need for lifestyle changes (Choi *et al.*, 2015; Cranney *et al.*, 2018). Self-management approaches may also be less familiar to these communities due to more collective understandings of responsibility (Choi *et al.*, 2015). How health coaching is understood in CALD communities has not been explored enough in health promotion programs (Sathe *et al.*, 2013). The difficulty with encouraging self-management has been noted if patients are used to health professionals managing their treatment regimes (Wagner *et al.*, 1996; Anderson and Funnell, 2000).

To ensure commitment from the participants, stakeholders stressed the need for bilingual coaches to be appropriately trained to work with those unfamiliar with the concept of goal setting. In contrast to the previous concerns of stakeholders about the ability of the communities to use a phone service (Cranney *et al.*, 2018), the participants formed positive relationships with their coach and found they could trust them. The coaches assisted participants to reach goals that were practical and tailored to their needs. Other research with Chinese communities around self-management have also encouraged health professionals to provide a 'collective passive-teaching approach' with direct recommendations that can be clarified and explained (Choi *et al.*, 2017, p. 322).

Refinement of program resources to address diverse needs in the communities

Although stakeholders recommended refining the booklets by providing more culturally appropriate examples

of Chinese food, some participants also wanted more information about purchasing western style healthy products in Australian supermarkets. This highlights the hybrid needs of the Chinese communities in Australia to help bridge their cultural needs. The nature of providing culturally competent health services involves understanding the impact of cultural beliefs on health seeking and management strategies (Helman, 1990; Aguirre-Molina et al., 2001; Jang et al., 2021) and the need for culturally appropriate healthy lifestyle information (Choi et al., 2015). The development of cultural resources should go beyond a simple translation of language. The resources will require input from experienced bilingual stakeholders and community members, checks of the cultural context, relevance and framing of the messaging. Producing culturally appropriate resources means addressing the diverse needs in CALD communities according to age, socio-economic background, education, country of birth and language groups. To ensure cultural appropriateness and optimal well-being, the program should support the adoption of the healthy parts of both the traditional and Australian diets (Guo et al., 2015; Cranney et al., 2018).

The evaluation found younger coaches may need assistance when working with the main target group of older people who may have more traditional health beliefs. There is a long tradition in the Chinese population of using traditional medicine concepts to understand illness (Lam, 2001). This shows the diversity in the Chinese communities where just providing bilingual coaches may not mean the service is fully bicultural or appropriate for all segments of the Chinese communities (Goldman and Smith, 2002; Blignault et al., 2008). Coaches should be appropriately trained about the amount of advice they can give regarding traditional foods and herbs, and recommend that participants check with their GP or herbalist if they have any concerns.

Promotion and referral pathways

The concerns of the stakeholders about the nature of the program highlighted the need for more tailored promotion and explanations of the program. This could include an explanation about the type of information provided to help people achieve health goals and modify lifestyle risk factors (Quinn et al., 2017). Chinese communities may also need to be informed about the risk factors of chronic disease and the susceptibility in their communities (Cranney et al., 2018). The program could be targeted to those at most risk and most interested. The need for a coordinator to assist with this process is noted as enhancing stakeholder and community

involvement (Jang et al., 2021). Effective referral pathways could be ensured by providing information on how to directly contact a bilingual GHS worker. As indicated, stakeholders were reluctant to refer without the assurance of bilingual support.

Strengths, limitations and implications

This article presents a successful adaptation of a mainstream health coaching service to a CALD population. The participatory and inclusive nature of the program with the continued support of stakeholders and community groups has enabled positive results for the health of the communities. It is an example of facilitating self-efficacy in CALD communities.

The information base of the article is based on the views of 11 participants (in 2 focus groups) from the group of 33 people that completed all aspects of the program. No information is available of the experiences or views of 57 people that withdrew. These views are not representative of whole Chinese communities but present perspectives of those who participated in all aspects of the program. Such views may represent those more connected to community programs and other activities. Stakeholders supplemented these findings and provided some feedback of people who withdrew from the GHS program or where not interested in such a program. Further research may need to consider why this program does not work for people who withdraw. Reasons for withdrawal were not available from the NSW GHS data at the time of research. Participants are either grouped into 'active withdrawal' if they no longer want to or are unable to continue or 'passive withdrawal' if the service cannot contact them after four call attempts over a 2-week period.

CONCLUSIONS

This article discusses how self-management approaches to chronic disease were applied in CALD communities. Qualitative findings reinforced strong preferences for a bilingual coaching model, acceptance of the concept of coaching by participants and the availability of culturally relevant resources as a key enabler to increase both participation and referrals into the GHS. This study found that program participants embraced the concepts of health coaching, healthy lifestyle, effective exercise regimes and understanding about nutritional value of food. The nature of the information and intensive coaching meant that interpreters were not adequate for participants to develop a rapport with the coach and discuss goal setting. Adequate resources are needed to enable

positive health results to ensure the best health for this population. Further research into the application of self-management and coaching techniques in CALD communities CALD communities are coping with self-management and coaching techniques could be further.

Supplementary Data

Supplementary material is available at *Health Promotion International* online.

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